

REF 7/c

Food

and Agriculture

THE FAO EUROPEAN BULLETIN



EUROPEAN REGIONAL OFFICE OF
THE FOOD & AGRICULTURE ORGANI-
ZATION OF THE UNITED NATIONS
VILLA BORGHESE - ROME

**No. 2 - APRIL - JUNE
1949**

SECOND YEAR

EDITED BY THE INFORMATION SERVICE OF FAO ROME

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

Headquarters

1201, Connecticut Avenue, N. W.
WASHINGTON 6, D. C.
Tel. EXecutive 7760
Cable Address: FOODAGRI - WASHINGTON

The FAO European Regional Office

Villa Borghese - ROME
Tel. No. 361,251
Cable Address: FOODAGRI - ROME
Bank: American Express Co.

FAO BROADCASTS OVER THE ROME RADIO EVERY OTHER WEDNESDAY ON TWO WAVE-LENGTHS

FOR EUROPE:

19.84 M. (15,120 KC/S)	25.40 M. (11,810 KC/S)
AND	AND
25.40 M. (11,810 KC/S)	31.15 M. (9,630 KC/S)
SLOVAK..... 15.00-15.15	GERMAN..... 19.05-19.40
POLISH..... 15.15-15.30	ENGLISH..... 20.10-20.45
HUNGARIAN..... 15.30-15.45	GREEK..... 20.45-21.15
SERBO-CROAT..... 16.50-17.05	RUMANIAN..... 22.15-22.30
FRENCH..... 17.25-18.00	RUSSIAN..... 22.30-22.45
TURKISH..... 18.00-18.30	CZECH..... 22.45-23.00

FOR SOUTH AND NORTH AFRICA:

25.40 M. (11,810 KC/S)
AND
31.15 M. (9,630 KC/S)
ITALIAN..... 19.40-19.55
ENGLISH..... 19.55-20.10
ARABIC..... 21.15-21.45

FOR NORTH AMERICA:

25.40 M. (11,810 KC/S)
AND
31.15 M. (9,630 KC/S)
ENGLISH..... 01.30-02.15
ITALIAN..... 02.15-02.55

FOR SOUTH AMERICA:

19.84 M. (15,120 KC/S)
AND
25.40 M. (11,810 KC/S)
PORTUGUESE..... 23.10-23.45
SPANISH..... 23.45-00.30
ITALIAN..... 00.30-01.25

FOR FAR EAST:

19.84 M. (15,120 KC/S)
AND
25.40 M. (11,810 KC/S)
ITALIAN..... 11.00-11.05
ENGLISH..... 11.20-11.30

ROME

TIME GIVEN IN CENTRAL EUROPEAN
MEAN TIME (GMT + 1 HOUR)

FOOD AND AGRICULTURE

THE FAO EUROPEAN
BULLETIN No. 2

April - June 1949

SECOND YEAR

QUARTERLY PUBLICATION
OF THE FOOD AND AGRICULTURE ORGANIZATION
OF THE UNITED NATIONS

SUMMARY

DAVID LUBIN, p. 78.

EDITORIAL, p. 79.

ARTICLES

C. ROMMEL - Swiss hail insurance during both world wars, p. 81.

BASILE D. KRIMBAS - Survey of Greek agriculture, p. 91.

R. JAUNE - Consolidation of agricultural holdings, p. 93.

UNICEF IN ACTION IN ITALY, p. 96.

TRAVEL IN EUROPE, p. 97.

ITEMS OF INFORMATION

[Nutrition, p. 98 - Agriculture, p. 100 - Economics and Markets, p. 118 - Fisheries, p. 130 - Forestry, p. 130 - Rural Welfare, p. 134 - News from Africa, p. 135 - FAO Activities, p. 136 - UNO, p. 145 - Conferences, Congresses and Meetings, p. 146 - Agricultural Publications, p. 152].

LEGISLATIVE NEWS

[United Nations Organization, p. 153 - Nutrition, p. 153 - Agriculture, p. 155 - Economic Affairs' and Markets, p. 159 - Statistics, p. 163 - Forestry, p. 165 - Game, p. 165 - Fishery, p. 165 - Rural Welfare, p. 166].

BIBLIOGRAPHY

Articles on FAO, p. 167.

New books, p. 167.

Signed articles published in the Bulletin remain the responsibility of the authors



The reproduction either in whole or in part of material printed in this Bulletin is permitted, but only on the express condition that the source is duly acknowledged as follows:— *Food and Agriculture, The FAO European Bulletin*, Villa Borghese, Rome (Italy)

Edited by the Information Service of FAO Rome



DAVID LUBIN

a citizen of the States of America, who first visualized the creation of the International Institute of Agriculture in Rome, was born on 1 June 1849, one hundred years ago. His was the inspiring mind behind the idea of international cooperation on the economic level. Many ideas like 'reasonable profit to producers and consumers alike' were his, and social justice was forever before his mind.

Whilst still a young man, his first enterprise was a private one, a store with novel ideas trying to introduce a fair sales policy through the system of fixed prices. These ideas may well have contributed to the development of the popular 'Department Store'. After travelling and studying, he settled down in California to farm and

in 1895 embarked on a campaign to help the fruit growers. He was successful in obtaining lower railway tariffs and inaugurated the parcel post and mail orders for agricultural produce.

Twice David Lubin came to Europe in search of support, and finally his ideas for the creation of an inter-governmental body to collect and disseminate information in the sphere of agriculture were accepted. Here in Rome he found the encouragement for his scheme in the highest quarters and in 1905, in the month of June, the first meeting for the creation of the International Institute of Agriculture took place under the patronage of the King of Italy. There followed a long period of fruitful international enterprise. However, beyond limited action in the specific field of agriculture, his mind was occupied with the far-reaching vision of a 'United States of the World' - a vision which has developed into an idea much discussed now-a-days. The International Institute which was dissolved in 1946 was the fore-runner of ideas which led through the League of Nations to FAO. Now FAO has inherited this birthplace of high ideals and practical ideas, carrying this heritage into the future of generations to come. The Fourth Session of the Annual Conference of FAO termed him 'David Lubin, the great pioneer of international cooperation in agricultural matters'; and he himself said of international cooperation, 'I am happy to be a humble soldier, a private in this Army. Do you understand?'

THE 'New Deal'

IN NUTRITION

Editorial on the occasion of the Second World Health Assembly

This month the Second World Health Assembly will be meeting in Rome, that 'centre to which all gravitates...' the European seat also of FAO which, by way of this editorial, desires to pay its respects to this august gathering and its sister Organization WHO with which it has so far had the most excellent relations in the field of nutrition and related matters.

In welcoming WHO to Rome, FAO is also not unaware of the gravity of the many problems awaiting the decision of the Assembly this month. FAO will in fact be genuinely interested and deeply concerned in view of the sacramental intimacy which exists between nutrition and health, as food is the basis of life and nutrition, the most important single factor in the preservation of health. Again, malnutrition is not always due only to defective diet or lack of food but often also to disease (conditioned malnutrition) and national nutrition can no longer be divorced from the national health or welfare of a nation. The need in the world today for joint attack by our two Organizations on the problems of malnutrition and disease is therefore most obvious, constituting a tremendous challenge to both our Organizations.

In his statement to the General Assembly of the United Nations last September, the Director-General of FAO said: 'I offer no easy and painless solution. Yet I see the possibilities of successful attack at several points... To improve the situation rapidly and permanently we must do these things concurrently, every nation contributing individually and all working together through the United Nations and the specialized agencies'.

It is seldom that one prefers to remember dark days but FAO always likes to look back

on those dark days of 1943 while, when the struggle of this recent war was at its height, delegates from 48 nations could nevertheless meet at Hot Springs in the beautiful peaceful atmosphere of the Virginia mountain forests, to discuss, not the problems of war but the problems of peace, particularly the feeding of the postwar world. And there FAO was conceived. It was there that the sacramental intimacy (already referred to) between national nutrition, national health and national prosperity was duly emphasized and that the strong plea was made for a New Deal in Nutrition — a plea which FAO wishes to repeat to the august Second World Health Assembly. Why? Because the doctor is becoming more and more the adviser to the statesman today (often he is the one authority to whom the delinquent statesman or politician will still listen); because The Society of Tomorrow will require a different type of physician to that of Yesterday — physicians who truly conscious of the social functions of medicine will consider themselves in the service of Society, prepared also to study sick people not only against the background of the Book of Medicine but also against the background of their home lives and socio-economic circumstances, for worry and hunger also make people emotionally maladjusted and sick and it is difficult to be either good or well when hungry . . . The Hungry know no reason.

While the great need for curative treatment is today still a tacit admission of the failure so far, in many respects, of Preventive Medicine, it has been refreshing to observe how WHO as the torchbearer for the coming New Order in Medicine is not only laying more and more emphasis on Prevention but feels that even Prevention is still too negative a view and

that public health services should become *promotive* (nothing less than that) and that as soon as the exceptionally bad disease areas in the world are under control, the necessary shift of emphasis from disease to health and the factors that promote it, will readily come to pass.

As FAO's strongest and most necessary link with WHO will probably always be in the field of nutrition and food production, FAO would like to believe that in WHO's very appropriate definition of health as 'a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity', the need for proper nutrition as a basic conditional factor to it all was so strongly implied that it required no special mention; that Nutrition, the 'stone discarded by the builders' will in the New Order in Medicine become an important foundation stone.

Jointly, it is hoped, our two Organizations will see in our two most important enemies, Malnutrition and Disease, not the struggle but a CHALLENGE.....to prove to the world that a programme of better nutrition is less costly than one involving the dealing with people who are weak or diseased, unhappy and unproductive; that, reckoned in terms of low vitality, impaired efficiency, actual sickness and hospitalization, malnutrition is a tax which no nation on earth — not even the United Nations — can go on paying.

While WHO will have a hundred-and-one more tasks to fulfil than limiting its field entirely to the traditional tasks of quarantine and sanitation, FAO will have to work towards: national feeding programmes which will be not only reformed systems of poor relief but which will be concerned with influencing chiefly the production of enough protective foods; increasing the efficiency of distribution so that food will be physically available where most needed at the time and at a price within the reach of the lower-income groups; establishment of school meals on a national basis in all countries; getting milk into children; establishment of communal feeding services; 'industrial' nutrition (for good nutrition pays industrial dividends); and advancing the peoples' knowledge of nutrition as it affects

their manpower, their industrial development, their national health and social life and their homes. A man unfortunately does not need to be fed only while he is a soldier and not when he has returned to civil life, or a worker only while manufacturing the goods of war but not when manufacturing the materials of peace.

In the dissemination of this information, we will undoubtedly also often be forced to recall the advice of the old parson for a successful sermon: 'Tell them what you are going to tell them, then tell it to them and then tell them what you have told them'.... and to do so we will necessarily have to ask ourselves the question: Are our lamps sufficient... are they burning brightly and are they well-filled with oil?

The World Health Organization has a section on Maternal and Child Welfare while FAO likewise is deeply interested in the better nutrition of the children of the world in the full belief that 'the world marches on the feet of its children'. Just as WHO believes in mass BCG vaccination programmes and will insist that School Medicine become an integral part of the educational system of all countries, so FAO would like to see milk and School Feeding become integral parts of child education. An underfed child on the school benches is a waste of State money. Children bring to school not only their minds but also their bodies, for our care and guidance. The material in the teacher's workshop is not wood, paint or marble but human material, the most costly in the world. And no longer should the march from the classroom to the soup kitchen be allowed to remain the depressing poverty parade which it still is in some parts of the world.

For in the New World that we are building, we human beings will once again be required and together our two Organizations will (through improved child nutrition and health services) have to move still closer to the pregnant woman, the infant and the growing child: for....

Want, Malnutrition and Disease are still very much abroad and are unfortunately no respecters of cultures: together WHO and FAO will have to guard against the establishment of

islands of security in an ocean of insecurity, for that also will not work. Individually, nationally and internationally we *are* our 'brother's keeper', and though nations may prefer to repudiate brotherhood they certainly cannot repudiate the tubercle bacillus, the contagion of slum conditions and the payment of heavy taxes to carry the sick, the malnourished and the unfit. The boomerang is inescapable.

In conclusion, FAO therefore wishes to assure the Second World Health Assembly of its extreme goodwill towards WHO in tackling

tasks of the magnitude and intricacy awaiting it particularly while there is still so much emergency and disruption about. Together with WHO, however, FAO will stand or fall in the fight for the New Deal. We will be discouraged neither by the amount of work awaiting us nor by criticism, for more often than not there is something constructive in all criticism. Seldom does one encounter the nonchalant self-confidence of the person who, when asked if he could play the violin replied he did not know, he had never tried.

SWISS HAIL INSURANCE DURING BOTH WORLD WARS*

by Dr **C. ROMMEL**

University lecturer, Berne

Difficult tasks have confronted Swiss agriculture during both World Wars. Since Switzerland is an inland country and has not direct access to overseas markets, and because the amount of land that can be devoted to agriculture is limited, it must rely on imports and its supply problem was therefore extremely difficult. This is particularly true of the period after 1940 since, after the defeat of France, Switzerland was completely surrounded by Germany and her Allies.

It was thus necessary for Switzerland to try to meet her own requirements as far as possible and to increase her agricultural production with this object in view. This led both to an extension of the area under crops and to enforced cultivation resulting in an increase in the total area of arable land.

Aside from the increased production due to the greater area under cultivation there was a sharp rise in prices of agricultural products. This rise reached important proportions especially during World War I. During World

War II a considerable rise in prices began to be felt but this was checked by helpful governmental measures decreed by the Confederation authorities fixing maximum prices for the different products.

The increased area of arable land and the rise in the prices of agricultural products had an inevitable effect upon Hail Insurance because new risks were incurred on the new arable land and the price increases made the risk on existing lands greater.

If the influence of war economy on Hail In-

* *Sources*: Eidgenössische Beschlüsse und Verordnungen. Statistisches Jahrbuch der Schweiz. Statistische Erhebungen und Schätzungen auf dem Gebiete der Landwirtschaft. Berichte der Schweizerischen Hagel-Versicherungs-Gesellschaft. Comptes rendus sur l'assurance cantonale vaudoise contre le dégâts de grêle. Hauser: Geschichte der Hagelversicherung in der Schweiz, Diss. Zurich 1925. Rommel: Hail insurance in Switzerland and its organization, in the International Review of Agriculture, Rome, June, 1943.

surance is to be adequately treated then not only the war years must be analysed but also some of the post-war years must be considered in each case. Thus it is evident that war economy does not disappear immediately as war ends but that its effects last beyond this particular moment. Both this economy and Hail Insurance return only gradually to their peacetime rhythm.

I.

HAIL INSURANCE DURING WORLD WAR I

A. When World War I began in 1914 the Swiss Hail Insurance Company had 66,897 policies representing Sw. fr. 80,865,170 worth of insurance. On the average the premiums were very low, only about 1.60%. The reserve funds at this time represented 5.70% of the amount insured. The Company therefore appeared to be sufficiently protected especially as eventual deficits could be met by collecting additional payments on past premiums.

B. World War I changed this situation considerably.

1. The difficulty encountered in meeting the country's needs led to an important increase in the amount of arable land during the second war year. But in the next war year non-compulsory farming resulted in a serious reduction in the amount of arable land and at the same time importing became more difficult. The Federal Council, therefore, issued a decree, 3 September 1917, concerning the ex-

tension of the area under cereal crops¹ basing it on a Federal decree of 3 August 1914 referring to measures for the protection of the country and for the maintenance of neutrality². Article 2 of this decree obliged landed proprietors and tenants to cultivate cereals during autumn 1917 and spring 1918, at least upon such an area as they had declared on the Swiss Agricultural Statistical form of July 1917. Furthermore Articles 4 and 5 ordered that the area to be sown with bread-grains in the autumn 1917 had to be increased by 50,000 hectares and this area was divided up among the various Cantons.

According to the Xth Report on Neutrality³ of the Federal Council the increase of the cultivated area up to spring 1918 reached only 32,367 hectares showing that the decree was respected to a great extent.

A further decree of the Federal Council of 17 December 1917, referring to the registration and the cultivation of potatoes during 1918, by Article 10, ordered a further 12,000 hectares to be cultivated during 1918 and at the same time allotted this area between the various Cantons⁴. A circular of 16 January 1918 from the Swiss Department of Economics

¹ Eidgenössische Gesetzsammlung N. F., Bd. 33, 1917, S. 699 bis 706.

² Eidgenössische Gesetzsammlung N. F., Bd. 30, 1914, S. 347.

³ Schweiz. Bundesblatt Nr. 22 vom 29. Mai 1918, S. 94.

⁴ Eidgenössische Gesetzsammlung N. F., Bd. 33, 1917, S. 1057 ff.

Year	Wheat		Rye		Oats		Barley		Corn-Maize		Potatoes	
	ha.	%	ha.	%	ha.	%	ha.	%	ha.	%	ha.	%
1914	41,160	100	24,780	100	33,740	100	6,000	100	1,000	100	46,500	100
1915	45,950	110	26,900	109	37,300	111	6,500	108	1,300	118	49,000	105
1916	55,300	133	17,800	72	25,500	96	6,750	113	1,550	141	54,500	117
1917	38,901	93	17,020	69	28,580	85	7,710	129	1,980	180	56,683	122
1918	61,010	147	29,000	117	35,000	104	9,000	150	3,000	273	59,800	129
1919	52,700	127	22,053	89	23,075	68	7,457	124	2,627	239	54,888	118
1920	48,000	115	20,300	82	22,500	67	7,200	120	2,300	209	49,800	107
1921	47,460	114	22,960	93	21,230	63	6,600	110	1,940	176	45,670	98

to the Cantonal governments concerning the increase of food production permitted the Cantons to cultivate corn-maize and specified vegetables on a part of the prescribed new area.

The following table¹ shows the increased crops and the extension of arable land resulting from obligatory cultivations.

It can be seen that in the year 1918, following on the Federal Council decrees of 1917 concerning obligatory cultivation, the maximum area was reached for all crops listed with the excep-

tion of oats. From 1919 on the area of cultivated land decreased continuously.

2. Considerable price increases for agricultural products had already begun in 1915. Governmental measures for fighting these increases did not yet exist. For cereal seeds only had maximum prices been fixed by an order of the Federal War Department issued on 24 August 1917.

The following survey indicates the price increases for the principal crops¹.

¹ Statistisches Jahrbuch der Schweiz 1921, S. 105.

¹ Statistisches Jahrbuch der Schweiz 1917, S. 230/231; 1921, S. 260/261.

Year	Wholesale prices per 100 kg. for the most important crops											
	Bread-grains						Oats		Barley for fodder		Potatoes retail price	
	Wheat		Rye		Corn-maize							
	Fr.	%	Fr.	%	Fr.	%	Fr.	%	Fr.	%	Fr.	%
1914	24.53	100	20.97	100	18.78	100	21.67	100	21.25	100	11.88	100
1915	38.34	156	32.96	157	27.39	146	33.98	157	33.19	156	14.82	125
1916	44.65	182	41.77	199	35.48	189	41.16	190	41.06	193	20.76	175
1917	60.19	245	58.80	280	51.25	273	54.53	252	55.17	260	22.11	186
1918	64.00	261	64.00	305	52.00	277	62.00	286	61.00	287	23.30	196
1919	64.00	261	63.37	302	50.00	266	61.50	284	60.00	282	23.24	196
1920	65.26	266	62.14	296	50.69	270	55.97	258	56.46	266	18.49	156
1921	63.00	257	57.78	276	48.20	257	40.37	186	40.44	190	16.48	139

The price increases for all crops mentioned were continuous. For most crops the highest price level was reached in the last year of the war. In the case of wheat only did the price continue to increase up to 1920.

Rye showed the greatest price increase, more than tripling its 1914 figure. Corn-maize, oats and barley for fodder reached about 280% of their pre-war price, wheat 266%, and potatoes nearly 200%.

In 1921, the third post-war year, a retrogression in prices occurred all along the line.

C. It was not long before the effects of war-time economy upon Hail Insurance became evident.

1. The increased cultivation of agricultural crops as well as the compulsory increase of

bread-grains and potatoes led to a greater demand for Hail Insurance. Another cause was the rising price for agricultural products which not only increased agricultural returns but also augmented the risk of losses due to hail damage. Hail Insurance therefore became much more extensive and a sharp rise occurred in the number of policies issued by the Company.

The following table shows the increase in the number of policies and of the amount insured by the Swiss Hail Insurance Company².

² The figures for 'Le Paragrêle' Hail Insurance Company of Neuchâtel, which during the war years had about 525 policy holders and an insurance capital around Sw. fr. 600,000, are not included in these statistics.

Year	Number of policies		Amount insured		
	Actual	%	Sw. fr.	%	Average per policy
1914	66,897	100	80,865,170	100	1,209
1915	68,877	103	90,471,120	112	1,314
1916	71,966	108	107,444,180	133	1,493
1917	80,444	120	142,549,840	176	1,772
1918	90,939	136	208,564,000	258	2,293
1919	91,262	137	224,613,290	278	2,461
1920	87,000	130	202,199,800	250	2,324
1921	85,690	128	189,954,100	235	2,217

The number of policies as well as the amount insured increased continuously up to 1919. The amount insured increased up to 278%, following a curve similar to that of prices, but in the first war years it did not shoot up in the same lightning fashion as prices did.

A certain amount of time was required before the full effect of the price increases was felt on Hail Insurance. The tremendous leap in the amount insured between 1917 and 1918 is particularly noteworthy and might be attributed mainly to the compulsory cultivation of bread-grains and potatoes.

It should be noted that the number of policies did not increase to the same extent as the amounts insured; the maximum level registered was only 137%. The reason for there being a smaller increase in the number of policies than in the amounts insured may be attributed to the fact that the increase of arable land had relatively little importance compared with the rise in prices.

That the rise in prices was the decisive factor in the increase of amounts insured may be realized by considering the sum insured per policy: this amounted to Sw. fr. 1,209 in 1914 whilst the average in 1919 was Sw. fr. 2,461 corresponding to a rise of 104%.

2. During the war and the first two post-war years the claims continued favourably. During the years 1914-1920 the damages paid only amounted to 1.02% of the sum insured or 69.75% of the premiums. The years 1914 and 1918 were also favourable, with the claims only amounting to 0.63% and 0.20% respectively

of the insured amounts. In spite of the volume of claims being generally favourable the damages paid in the years 1915 and 1917 amounting to 1.54% and 2.39% respectively were greater than the premiums collected, making it necessary to have recourse to the reserve fund. In order to cover the losses Sw. fr. 305, 662 had to be taken from the reserve fund in 1915 and Sw. fr. 1,072,065 in 1917.

3. The reserve fund was not very favourably affected by the rapid increase of the amounts insured. Whilst at the beginning of the war the reserve fund represented 5.70% of the amounts insured, it could not keep step with the soaring volume of business and therefore its ratio to the insured amount fell. To these factors must be added the effects of the years 1915 and 1917 when damages were very heavy making it necessary to resort to the reserve fund so that it registered not only a percentage decrease but also an actual one.

The following table shows the oscillation of the reserve fund from 1914 to 1920.

Year	Sum Insured	Position of the Reserve Fund	
	Sw. fr.	Sw. fr.	% of the sums insured
1914	80,865,170	4,617,744	5.70
1915	90,471,120	4,490,822	4.96
1916	107,444,180	4,686,774	4.36
1917	142,549,840	3,840,547	2.69
1918	208,564,000	6,454,883	3.09
1919	224,613,290	7,798,086	3.47
1920	202,199,800	9,368,958	4.63

An actual reduction of the reserve fund may be seen for the years 1915 and 1917. 1917 marks the lowest point reached by the reserve fund with 2.69% of insured capital. Thanks to the favourable results of the following years important allocations could be made to the reserve fund so that already by 1919, the year marking the highest insured amount, a level of Sw. fr. 7,798,086 representing 3.47% of the insured amount was reached. Thanks to a favourable volume of claims and a decreased insured amount the reserve fund

showed a further important increase in 1920. In this year it doubled the figure of its 1914 reserve fund and went back to 4.63 % of amount insured.

II.

HAIL INSURANCE DURING WORLD WAR II

A. In 1939 the Swiss Hail Insurance Company had 96,883 policies and an insured amount of Sw. fr. 140,593,470. The average premium was about 3 %; this premium rate, with respect to business equilibrium and to actual and local risks, remained satisfactory. The reserve fund showed a capital of Sw. fr. 8,110,605 corresponding to 5.77 % of the amounts insured.

Both the Swiss Hail Insurance Company and the governmental Hail Insurance Institute were active in the Canton of Vaud, the latter having an insured amount of Sw. fr. 47,161,243 and an average premium rate of just over 3 %. This premium rate was very low considering that nearly half the business was with wine insurance and also that the hail risk in the territory of this Canton is extremely high. In 1938 the reserve fund had only a capital of Sw. fr. 1,602,241 corresponding to 3.40 % of the amount insured.

B. When World War II began the Federal Law of 1 April 1938 for providing the country with supplies of essential goods¹ was already in effect. According to Article 4 of this law the Federal Council was empowered to order greater cultivation of agricultural products and more felling in forestry. In the event of war becoming an immediate danger the Federal Council was empowered by Article 8 to issue decrees for preventing unjustified price increases on supplies already in the country.

On the basis of this law a Federal decree was issued as early as 6 April 1939 concerning measures for the promotion of field crops². Art. 1, Para. 1, of this decree reads:

‘With the object of making better provi-

sion for the food supplies of the country, the adjustment of agricultural production to the domestic needs of the country and the easing of the dairy situation, the Federal Government will take measures for the promotion of agriculture’.

Article 2 states that the Federal Council first of all has to take measures for the increased cultivation of oats, barley and corn-maize and that these measures must be taken in such a way that results are possible similar to those obtained in the cultivation of bread-grains (Wheat, Rye and Spelt).

The imminent war led to the Federal decree of 30 August 1939 referring to measures for the protection and maintenance of neutrality giving full powers and mandate to the Federal Council for the duration of the war¹.

When war broke out on 1 September 1939 the legal basis for increased cultivation and price control was already laid. By a decree of 1 October 1940 referring to the extension of cultivation, the Federal Council authorized the Federal Department of Economics to give directions for the use of cultivable areas, to determine the degree to which land had to be used and to what extent self-support had to be arranged and to order that land not previously employed for agriculture be made use of for cultivation.

The Federal Department of Economics was also entrusted with establishing the minimum area to be sown in each Canton and to promote the efforts towards self-support of non-agricultural parts of the population as well. Where cultivable lands were insufficiently cultivated compulsory renting was contemplated. The Federal Department of Economics carried out the intensified cultivation program in seven steps and issued decrees setting a goal for each year.

C. The following statistical surveys show the effect of these governmental measures.

1. The arable land increased essentially owing to compulsory cultivation during the war years. The increase of the arable land was

¹ Eidgenössische Gesetzsammlung N. F., Bd. 54, 1938, S. 309-313.

² Eidgenössische Gesetzsammlung N. F., Bd. 55, 1939, S. 419-422.

¹ Eidgenössische Gesetzsammlung N. F., Bd. 55, 1939, S. 769-770.

due in part to the transformation of meadows into arable land and also to the creation of new cultivable land through improving and clearing. When the war began arable land amounted to 209,301 hectares. The following table shows its development¹.

Year	Arable Land	
	hectares	annual increase
1939	209,301	100.0
1940	212,498	101.5
1941	263,511	125.9
1942	299,419	143.1
1943	341,056	163.0
1944	354,371	169.3
1945	355,276	169.7
1946	342,966	159.1
1947	306,800	146.6

¹ Statistische Erhebungen und Schätzungen auf dem Gebiete der Landwirtschaft, Brugg 1947, S. 37.

About 11,500 hectares cultivated by smallholders must be added to the areas given above for the last war years.

Arable land increased continually until 1945; it was possible to increase it by 70%. The area of the smallholders could account for another 5%. In the first postwar year a reduction is already seen in the amount of arable land, becoming more pronounced in 1947. In this year non-agricultural holdings were not compelled to continue cultivation; the cultivation of bread-grains alone remained compulsory.

2. The authorities also put their best efforts into the battle against rising prices. The Federal Council fixed the prices for cereals, these prices were also valid for products to be taken over by the government. The competent authority for the fixing of potato prices was the Federal Alcohol Administration in conjunction with the Federal Price Control. There, also, good results were obtained. The following table gives indications of price movements for the main agricultural products during the war years and after¹.

¹ Statistisches Jahrbuch der Schweiz 1946, S. 354-355.

Year	Average annual prices in Switzerland per 100 kg.											
	Wheat		Corn-maize		Rye		Oats		Barley		Potatoes	
	Sw. fr.	%	Sw. fr.	%	Sw. fr.	%	Sw. fr.	%	Sw. fr.	%	Sw. fr.	%
1939	38.28	100	27.32	100	27.60	100	21.23	100	22.59	100	15.16	100
1940	38.35	106	29.84	109	31.25	113	30.34	143	31.36	139	18.58	123
1941	44.27	122	37.79	138	40.45	147	38.72	182	39.63	175	21.87	144
1942	48.52	134	42.65	156	45.20	164	41.12	194	42.11	186	23.84	157
1943	51.24	141	45.68	167	48.23	175	43.50	205	43.95	195	23.08	152
1944	52.80	146	47.08	173	49.31	179	45.98	217	45.99	204	22.94	151
1945	53.44	147	48.00	176	50.20	182	47.21	222	47.25	209	23.84	157
1946	54.74	151	50.06	183	51.31	186	49.01	231	49.34	218	24.56	162

All the aforementioned products show a continuous rise in price. It is thanks to the governmental measures that they remained more

moderate than during World War I. Wheat, the most important bread-grain, rose only to 151% whereas during World War I wheat

prices rose to 266% of the pre-war level. The greatest increase was registered by oats ¹.

D. As in World War I, the increases in cultivation and prices had aggravating effects in different directions on Hail Insurance. This was experienced not only by the Hail Insurance Institute of the Canton of Vaud which had to close down in 1943 but also to a lesser degree by the Swiss Hail Insurance Company.

1. The development of business and of claim in the Swiss Hail Insurance Company for the years 1939 to 1947 is shown in the table below.

The following results may be gathered from this table:

(a) The highest number of policies was reached in the years 1944-1946. The reason why the highest figure had already been reached in 1944 is because in this year the business of the Swiss Hail Insurance Company was augmented by the addition of that of the Vaud Canton Institute and therefore the natural increase

¹ Price increases did not reach their limit, however, by 1946. The rise in prices on the world market for bread-grains, the greater cost of production and the smaller yield due to the drought of 1947 resulted in higher prices for those quantities taken over by the government. 1947 prices were as follows: Wheat about Sw. fr. 63.50; corn-maize about Sw. fr. 58; and rye about Sw. fr. 61; all per 100 kg.

was artificially accentuated. The increase in the number of policies to about 150% of the pre-war level may first of all be attributed to the increased cultivation which brought arable land up to 169.7% of its former figure.

(b) The amounts insured by the Swiss Hail Insurance Company in 1946, the first post-war year, reached a maximum of 347.5 million Swiss francs and the rate of 247%. Thus their increase was far greater than that of the number of policies. The increase in amounts insured is due to increased cultivation as well as to the rise in prices for agricultural products. It should be observed that the volume of business during 1944 was augmented by 58.9 million Swiss francs from the Vaud Canton Institute. The temporary decrease of amounts insured in 1945 was caused by the heavy frost damage which occurred at the beginning of May, thus reducing or making unnecessary a large number of hail insurance policies. The drop in the amounts insured during the second post-war year could be definitive and might be attributed to the abandonment of arable land and the reduced number of supplementary insurance contracts.

The average amount insured per policy rose considerably corresponding to the increased prices for agricultural products. And in this respect also the highest level, Sw. fr. 2,372 per policy, was attained in 1946.

Swiss Hail Insurance Company Business Results

Year	Number of policies		Amount insured			Premiums		Claims		
	Actual	%	Sw. fr.	%	per policy	Sw. fr.	% of amount insured	Sw. fr.	% of amount insured	% of premium
1939	96,883	100	140,593,470	100	1,451	4,142,500	2.95	4,066,678	2.89	98.17
1940	98,380	102	151,627,610	108	1,541	4,378,992	2.89	5,311,915	3.50	121.30
1941	108,730	112	191,686,960	136	1,763	5,379,168	2.81	2,957,809	1.54	54.99
1942	126,686	125	240,631,490	171	1,994	6,691,990	2.78	10,254,247	4.26	153.23
1943	124,458	128	270,784,440	193	2,176	8,428,887	3.05	3,990,546	1.47	47.34
1944	152,771	158	343,415,610	244	2,241	11,372,224	3.32	6,452,775	1.88	56.74
1945	143,220	148	323,597,760	230	2,259	10,454,283	3.23	5,605,935	1.73	53.62
1946	146,528	151	347,520,710	247	2,372	12,066,722	3.47	6,603,375	1.90	54.72
1947	137,370	142	310,758,900	221	2,262	10,777,555	3.47	5,961,464	1.92	55.31
9 year total	1,129,026		2,319,616,950		2,055	73,692,321	3.18	51,204,744	2.21	69.54

In order to moderate the soaring increments registered in amounts insured, in 1941 the Administrative Council of the Company decided to establish annually maximum rates per unit area insured for the most important crops. These rates permit the insurance of a good average harvest; the most important rates are as follows :

Year	Maximum rates in Swiss francs per 0.01 hectare							
	Wheat		Rye		Barley		Oats	Potatoes
	Win-ter	Sum-mer	Win-ter	Sum-mer	Win-ter	Sum-mer		
1941 . .	16	14	14	12	12	10	12	28
1942 . .	17	15	15	13	13	13	13	32
1943 . .	17	15	15	13	13	13	13	32
1944 . .	18	16	16	14	13	13	13	35
1945 . .	18	16	16	14	13	13	13	35
1946 . .	18	18	18	14	14	14	14	35
1947 . .	18	18	18	14	14	14	14	40
1948 . .	20	20	20	16	16	16	16	40

(c) The premium average is 3.18%, almost double what it was at the time of World War I. After the publication of the new insurance terms in 1940 each premium covered the various and individual risks.

(d) The volume of claims in 1940 and 1942 was large. This was particularly the case in 1942 which, with losses amounting to 10.25 million Swiss francs and a claims rate of 4.26%, must be considered a catastrophic year. Nevertheless the overall claims situation between 1939 and 1947 was not unfavourable, the damages paid amounted to 69.54% of the premiums collected.

(e) The reinsurances started in 1928 turned out to be especially worth while and were underwritten by a number of big Swiss insurance companies who gave excellent terms in the national interest. During World War II reinsurance combined quota cession with a system of insurance of surpluses which links a quota of 25% with a surplus of 75%. The excess is brought into play if the losses exceed the original premiums less the administrative expenses. *

* Rommel, see previous reference, p. 210 onwards.

The balance for the reinsurance for the first twenty years, 1928-1947, remained satisfactory. The reinsurers received premiums amounting to a total of about 30 million Swiss francs and about 25 million francs was repaid between damages, administrative expenses and distributed profits.

2. The reserve fund of the Swiss Hail Insurance Company at the beginning of the war amounted to Sw. fr. 8,110,605, corresponding to 5.77% of the amount insured. The following survey illustrates the further development of the reserve fund which in wartime oscillated considerably.

Year	Amount insured	Position of the reserve fund	
	Swiss francs	Swiss francs	% of the amount insured
1939	140,593,470	8,110,605	5.77
1940	151,627,610	7,478,600	4.93
1941	191,686,960	8,315,481	4.34
1942	240,631,490	7,104,818	2.95
1943	270,784,440	8,842,948	3.27
1944	342,415,610	10,639,627	3.11
1945	323,597,760	12,662,419	3.91
1946	347,520,710	15,024,764	4.32
1947	310,758,900	17,269,468	5.56

The reserve fund could not keep pace with the rapid increase of the amounts insured. As in World War I it registered a relative reduction. The taking over of the Vaud Canton Institute by the Swiss Hail Insurance Company in 1944 exercised a particular influence upon the relationship between the reserve fund and the amounts insured. Thus the reserve fund, in spite of an important actual increment, dropped back to 3.11 % of the amount insured. The reduction of the reserve fund by payment of claims in the years 1940 and 1942 became more accentuated. The reserves suffered an actual reduction in both those years. In the year 1945 a considerable strengthening of the reserve fund occurred, not only an actual but also a relative one. The reserve fund in 1947 amounted to more than double

the 1939 figure corresponding to 5.56 % of the amount insured.

3. The following table illustrates the business of the Vaud Canton Hail Insurance Insti-

tute beginning with 1939 up to the time it closed in 1943. It was not possible to publish the number of policies as those for compulsory wine insurance were not given by the Institute.

Year	Business results of the Vaud Canton Hail Insurance Institute						
	Amounts insured		Premiums		Claims		
	Sw. fr.	%	Sw. fr.	% of insured amounts	Sw. fr.	% of amounts insured	% of premiums
1939	47,161,243	100	1,471,042	3.21	1,046,438	2.22	71.14
1940	43,802,084	93	1,331,698	3.04	1,216,714	2.78	91.37
1941	50,998,920	108	1,536,171	3.01	2,211,916	4.34	143.99
1942	65,617,150	139	1,895,560	2.89	6,081,202	9.27	320.81
1943	65,930,000	140	2,603,061	3.95	356,950	0.54	13.71

(a) Taking into account the compulsory character of the insurance for the two main crops of the canton, that is to say wine and bread-grains, including at the beginning of the war all proprietors of vineyards and land under bread-grains, the amounts insured by the Institute do not show this tremendous rise as did those insured by the Swiss Hail Insurance Company. A noteworthy increment began only in 1942 and may be attributed to the increase of arable land which amounted to 36 % in the Vaud Canton, and to the increased rate for the compulsory minimum insurance from Sw. fr. 6-8 to Sw. fr. 10 per 0.01 hectare for bread-grains. Thus the amount insured increased by about 40 % in 1942 and 1943.

(b) The premiums were rather low. On the average they amounted to only 3.23 %, a rate which did not sufficiently take into account the size of the local and real risks.

(c) Big losses resulted in 1941 from claims as the damages paid amounted to 144 % of the premiums collected. The following financial year was catastrophic with damages to be paid by the Institute amounting to more than 6 million Swiss francs and the incredibly high claims rate of 9.27 %.

After the already weak reserves had been completely used up by settling the Institute's obligations, which still left a deficit of Sw. fr. 2,815,232, it was decided to dissolve the Insti-

tute. The Institute could not avoid this fate although the premiums increased notably in 1943, by about 35 %, and the claims rate also remained favourable at 0.54 %.

III.

CONCLUSION

The foregoing may be summed up thus :

A. The development of Hail Insurance in both World Wars follows a noticeably parallel course.

1. Compulsory cultivation and voluntarily increased cultivation resulted in important additions to the amount of arable land. To this must be added the results of the increased prices for agricultural products. Both these factors brought about increasing yields and therefore greater demand for hail insurance.

2. On the average the claims during war-time and during the first post-war years were not unfavourable. In spite of this it was necessary in both cases to resort to the reserve fund during the second and fourth war years to cover the claims.

3. The reserve fund of the Swiss Hail Insurance Company could not keep pace with the extraordinary development of their business and therefore decreased relatively. To this must be added the effect of the withdrawals

made in both cases during the second and fourth war years which caused an actual reduction of the reserve fund. The actual and relative lowest level of the reserve fund was reached in both World Wars during the fourth year. The reserve fund of the Vard Canton Institute had to be sacrificed on account of the catastrophic claims which were made during 1942. The Institute had to be closed on account of excessive debts.

B. The differences for war economy and hail insurance in the two wars are as follows :

1. In World War II war economy applied more stringent measures.

(a) Increased cultivation was only of minor importance in World War I as compulsory cultivation was not decreed before 1917 and concerned only bread-grains and potatoes. At the very beginning of World War II, on the contrary, there was an all-out program for the extension of arable land within limits consistent with natural and economic resources which brought about excellent results.

(b) Prices, which in World War I rose unhampered, were generally checked by governmental measures.

2. Hail Insurance during World War II was in a much better position than in World War I.

(a) The increased cultivation led indeed to a great increment in insurance. The in-

crease in arable land, about 70 %, enlarged the basic possibilities for insurance. The increment of insurance business resulting from this was considered welcome and a healthy factor in the development of the company.

(b) Government price restrictions checked the all too rapid increase of amounts insured per hectare which otherwise could have brought an artificial and unhealthy element into the growth of insurance. The position of hail insurance in World War II was more favourable because the rise in prices remained within more moderate limits than in World War I.

(c) The annual fixing of the maximum amount insurable per hectare and per kind of crop provided another retarding element to combat the unhealthy and extraordinary development of the insurance business.

(d) The financial position of the company became consolidated through premiums generally higher compared with 1914 and providing sufficient coverage for risks. This also reduced the danger of resorting to the reserve fund to meet disastrous damages. In this way in the second post-war year the reserve fund was already able to return to its 1939 percentage level.

(e) By now there is a firmly established reinsurance, as well as the reserve fund, which could meet the greater part of claims resulting from any disaster.

SURVEY OF GREEK AGRICULTURE

The economy of Greece is based mainly on agriculture. Before the war (1939), the agricultural income in Greece amounted to 34.6 % of the total national income ; adding the income from stockbreeding and forests, it represented 45.38 % No other branch of Greek economy equalled this percentage. If the income from farming, stockbreeding and forests is compared with that from national production, this percentage rises to 54. In 1947, after the war, this income amounted to 36.10 % of the national income in Greece.

On the other hand, the population engaged in agriculture represents 65 % of the working population in Greece.

Agricultural products represented in value 85 % of the total exports of Greece. Tobacco alone amounted to 32.5 % and raisins to 11.4 %.

FEATURES OF GREEK AGRICULTURE

The agricultural holding in Greece is greatly split up. The plots are very small because of the density of the rural population (157 inhabitants per square kilometre of cultivated land). Their size varies between 1 and 3 hectares : the lowest in Europe. The result is, on the one hand, the impossibility of utilizing fully the available power of draught animals, and, on the other, the extension of crops requiring considerable labour (tobacco, cotton, grapevine, olive and tree crops in general, truck crops— according to local conditions).

One of the chief factors limiting agriculture is the rainfall. The insufficient precipitations, distributed unequally and irregularly, and the prolonged drought over a long period of the year, all necessitate the cultivation of deep-rooting crops, such as certain trees capable of obtaining deep-lying water. Conditions

by **BASILE D. KRIMBAS**

Professor of the School of Advanced Agronomic Study, Associate Member of the Academy of Athens

are different on the plains which, however, only represent 15 % of the total area ; here wheat, industrial plants (cotton, etc.) and tobacco can be cultivated. For the remaining land, the vine, olive and in the second place, citrus are indicated.

In Greece, the greater part of the mountain and stony areas is suitable for the raising of small stock (sheep, goats) which can utilize this mountain pasture. Cattle breeding is mainly directed to the raising of draught oxen. In the environs of the large cities, where truck crops add to the food supply and where milk is easily obtained, milch cows are bred.

All these factors influence the cost of agricultural produce. In addition, yields are poor. On the other hand, however, the quality is excellent.

During the ten years which preceded the war, considerable progress had been made in Greek agriculture. Improved methods of cultivation and farming permitted a permanent increase in yields. New land was put under cultivation. Fallow land was slightly reduced. Cotton-growing increased 345 %. The domestic requirements were covered and a certain amount was exported. The war and enemy occupation halted this production. The measures now taken have repaired the damage and progress made is already evident. It is expected that within a few years it will be possible to increase the production of foodstuffs and improve the quality. This will mean better food supplies for the Greek people, especially the rural section, even taking into account the normal increase in population which, in four years, will number 8,270,000. Before

the war the diet did not provide the necessary amount of calories, and the health of the people suffered. It is hoped to obtain 2,473 calories per caput per day in the future.

It is also anticipated that there will be an increase in forage production and agricultural products for industrial processing, a reduction in the importation of agricultural produce, an increase in agricultural exports and more employment for agricultural workers.

Greece, however, will require to continue importing :

Wheat.	386,000	tons
Soybean flour.	19,000	»
Rice.	24,000	»
Sugar	81,000	»
Vegetables	9,000	»
Meat.	16,000	»
Milk powder	18,000	»
Tinned milk	25,000	»
Cheeses	1,000	»
Dried fish (cod).	26,000	»
Tinned fish	1,000	»
Eggs	2,000	»
Cocoa	2,000	»
Coffee	6,000	»

Exports of agricultural products are expected to run as follows :

Tobacco	60,000	tons
Olive oil	25,000	»
Currants	70,000	»
Sultana raisins	30,000	»
Citrus fruits	15,000	»
Table grapes	25,000	»
Wine	50,000	»
Olives	15,000	»
Dried figs	15,000	»
Melons, etc.	2,000	»
Canned vegetables, tomato extract.	4,000	»

Almonds	1,000	tons
Olive husk oil	5,000	»
Brandy	320	»
Carob meal.	14,000	»
Mastic	130	»
Colophony and turpentine .	15,000	»

These exports will be facilitated by the decrease in production costs which will enable the domestic prices to be brought in line with the international prices. The spirit of collaboration now being established in Europe will undoubtedly improve the standard of living in the countries of this continent.

Since, before the war, the United Kingdom and Germany were important consumers of Greek agricultural products, the economic recovery of the former and the restoration of German economy will contribute eminently towards increasing the consumption of Greek agricultural products. A program is being planned to employ 228,000 workers (counting 250 working days for each farm worker, 280 for operators in the agricultural industries and 180 for fishermen), namely, 48,000,000 working days for agriculture and stockfarming, 17,000 for agricultural industries and foresters.

As already pointed out, Greek products cost more than those of other European nations. In the event of overproduction, measures would have to be taken to protect the farmers for the stability of their holdings. Moreover, it is to the general interest to foster the production of staple products.

As regards exports, the principal products, in quantity and value, as evident from the preceding table, are tobacco, raisins, olive oil, wines, olives and table grapes.

CONSOLIDATION OF AGRICULTURAL HOLDINGS

by **R. JAUNE**

Ingénieur agronome A. I. Gx.

Europe today is short of food supplies. More and more food must be produced. Efforts are being increased in all branches of agricultural research to reach the one universal goal, namely, that of feeding the ever growing populations.

The motorization of farming and the mechanization of the farm are means employed to attain the desired result.

Farming in western Europe is chiefly practised on small and medium-sized holdings operated by family labour.

To speak today of small and medium-sized holdings is to speak about the excessive parceling or fragmentation of the land, implying the serious difficulties of rationalization.

The disadvantages of splitting up holdings are well known :

- Difficulty in using machines owing to the small size of the plots, their configuration, dispersion ;

- High cost of going to and from the scattered parcels of land ;

- Waste of time ;

- Difficulty of supervision ;

- Losses in arable land (headlands proportionately too large) ;

- Complex boundaries, causing misunderstanding between neighbours, continual boundary lawsuits ;

- Difficulty of carrying out drainage operations, irrigation, etc.

What are the remote causes of this state of things ?

The origin of the dispersion of crop land, its excessive subdivision and patchwork lay-out, is probably due mainly to the inheritance laws which have endured for generations, to the splitting up of more or less large holdings with

the object of their alienation by shares, and lastly, to the general extension of lines of communication (roads, canals, railways) throughout the countryside.

The principal cause of this evil lies in the application of the law of succession based on the division of the inheritance into equal parts.

In the first place it should be recalled that two motives — varying according to place and period — have always inspired the system of succession :

- either it was desired to safeguard the principle of preserving the estate in the possession of one family — in this case the system of undivided succession by the principal heir become head of the family,

- or each heir could demand the division of the estate into equal parts. This system is the cause of the excessive splitting up of agricultural holdings and their fragmentation.

The division of the estate and the allocation of a share to each heir undoubtedly complied with the sentiment of equality and justice advocated long before by the Roman law. The Napoleon Code, in turn, prompted by the conceptions derived from the French Revolution, sanctioned this usage.

As Ch. Gide remarks, however, land subdivision, a disastrous practice 'scarcely affects the large estates because their proprietors generally have sufficient liquid assets to permit them reserving the estate for one of the children, while assuring the others an equal share in money.....'. On the other hand, the proprietor whose sole fortune consists of his agri-

cultural holding, 'cannot prevent it from being split up into equal shares'.

At all events, the situation is such at present that the country-side appears to be strewn with a patchwork of plots, small in size and irregular in form, which interpenetrate to such a degree that all mechanical tilling of the soil becomes extremely arduous, if not impossible. In addition, the parcels of land are frequently inclosed and subjected to vexatious easements, or strung out on slopes of difficult access or else are far removed from any road negotiable by tractors.

The scattering of the plots of one farm sometimes reaches unsuspected proportions. A case is cited of a French farm 44 ha. in size, split up into 50 parcels, which require 17 km. of fencing entailing a loss in arable area of 2.7 ha. Another farm, also in France, covered a total area of 14 ha., divided into 28 plots. Now consolidated it forms one block which, it appears, can be farmed in two-thirds of the time formerly required.

In Switzerland, some farms comprise 100 and even 150 parcels of land.

In Belgium, as an example of excessive fragmentation, it is customary to cite the case of a holding of about 50 ha., consisting of 34 plots, belonging to 16 proprietors, the largest parcel covering 6 ha. 25 ares and the smallest, 10 ares. The most distant parcel is 90 minutes' walk from the centre of the farm. I myself know of a farm in Hainault, 33 ha. in area, where the crop area and grassland are divided up between 9 proprietors. The most distant parcel of land is located 4 km. away from the farm buildings. I may also mention the case of a large farm in the Gembloux region which aggregates 73 cadastral parcels combined into 24 'blocks'. The largest arable parcel covers 17 ha. 65 ares, while the smallest does not exceed 150 sq. metres. Still another case: a farm in Belgian Luxembourg, on the frontier of the Grand Duchy of Luxembourg, comprises 38 cadastral parcels, grouped into 12 'blocks'; the largest parcel covers 6 ha. 38 ares, the smallest 670 sq. metres.

Land fragmentation reached disastrous proportions chiefly after the 1914-18 war. The density of the agricultural population was one

of the determining factors in augmenting subdivision of holdings. The demand for cultivable land, in effect, incited many proprietors to divide their holdings into parcels sometimes very small in size, and which were either alienated or leased.

Some countries, however, have long applied laws — frequently based on ancient local customs — which tend to safeguard the unity of the holding. These old laws, these ancient customs, are they not the resultant of the need to maintain the prestige of the principal heir — new head of the family — and also to prevent the formation of multiple parcels of land with little earning capacity? It may be noted that these unwritten laws are generally derived from the old Germanic tradition, and they are still, or were recently, applied particularly in Scandinavia, Germany, Austria and England.

As I have just mentioned, the French Civil Code is the origin of the serious problem of land fragmentation in Europe, as, it should not be forgotten, the Napoleon Code influenced to some extent all European legislators at the beginning of the XIXth century.

Technical and economic needs, however, necessitated making reductions and amendments in the rigid law of divided succession.

In Switzerland, for example, the Civil Code of 1912 favours transfer in full of the holding. Likewise, in Italy, the legislation of 1942 departs to a considerable extent from the old conceptions of the Napoleon Code and tends to oppose the splitting up of holdings. In Finland, by 1942 some 2 million hectares had been consolidated. Even in France, the Decree of 17 June 1938 made it impossible in some cases to divide the personal and real estate — for a maximum of five years.

Besides the amendments made in the existing legislation — and, in my opinion, important as regards both the spirit which inspired them and their practical value — measures were taken to diminish the extent of transfer ownership of agricultural holdings by inheritance. This gave rise in many countries to the idea of 'indivisible economic units', that is to say, minimum areas of land sufficient to support a peasant type family. This measure

aimed chiefly at reinforcing the effect of the consolidation operations already achieved.

In general, the evolution of the inheritance law tends to depart, to an increasing extent, from the system of division in kind to turn towards undivided succession, with a view to consolidating landed property. (FAO European Office - 1st Meeting of Experts on Agricultural Machinery, Rome, 16-18 April 1947).

In addition to the obvious difficulties, land consolidation offers a wide range of advantages no less obvious which will benefit the community and consequently the individual. Need they be mentioned?

While excessive fragmentation frequently obliges the many smallholders concerned to employ a uniform rotation, restriping allows them to adopt the rotation they prefer according to local and general conditions.

The disputes of long standing over boundaries will be settled and the new boundaries will right matters for some time to come.

Consolidation increases — sometimes considerably — the crop area of the holdings as it reduces the extent of the headlands, hedges and fencing, and eliminates the ditches. The gain thus obtained may amount, says Tcherkinsky, to 3 to 6 % of the total area of the holding, the percentage depending on the thoroughness of the consolidation and on the number of parcels of land.

Greater use can be made of agricultural machinery on fair-sized holdings of easy access.

The farmers, who are the most directly concerned, have understood the need for arran-

ging some form of consolidation among themselves without waiting for the law to take steps. Anyone comparing the lay-out of a holding with the cadastral plan is astonished to find that, in many cases, the actual arrangement no longer corresponds to the plan. Sometimes the difference is very considerable. The reason is that the holder of the farm has voluntarily exchanged fields with his neighbours. The winding boundaries have been adjusted, roadways opened, diminutive plots combined into one, and fences and hedges have been removed. Each farmer was able to benefit from these changes in a situation which originally was very chaotic. The owners, however, find some difficulty in recognizing the boundaries of their property.

Therefore, one cannot encourage enough all efforts tending to generalize the practice of consolidation and to reduce land division to a minimum, thus officially sanctioning a definite situation already frequently established under the impulse of circumstances, and to the very appreciable benefit of agricultural interests.

Lastly, it is to be noted that a 'Draft bill on the consolidation of agricultural holdings' was introduced to the Senate on 10 March 1948 by the Minister of Agriculture of Belgium. The juridical nature of this bill is clearly detailed in the preamble.

The bill proper considers separately 'Conventional consolidation' (voluntary) and 'Legal consolidation' — the latter having to be decreed — when circumstances require — by Royal Ordinance on the proposal of the Minister of Agriculture.

UNICEF *in Action in Italy*

UNICEF is closely co-operating with FAO and WHO through Joint Committees which have considerably contributed towards the realization of its objectives in the fields of nutrition, health, and child and maternal welfare.

The scope of its activities is evident in the case of Italy — one of its 16 receiving countries — where the UNICEF program provides for 950,000 persons. Two other major receiving countries are Poland and Yugoslavia with 700,000 and 600,000 individuals respectively.

The story of UNICEF in Italy begins with the organization of the headquarters for the Italian Mission in Rome in October 1947, headed by Chief of Mission, Dr Thorwald Madsen of Denmark, aided by international staff members from Bolivia, France, the United Kingdom and the United States.

The first feeding project began operations in December 1947 and by March a supplementary feeding of 300 calories daily was being given to more than 337,000 mothers and children in orphanages, kindergartens, foundling homes and mothers' messes throughout Italy. By July the number partaking of UNICEF foods skipped to 628,000 with the addition of summer colonies for undernourished children.

Foods supplied by UNICEF are milk, meat, fish, fats and cod liver oil matched by Italian Government contributions of flour, pasta, sugar and oil to create a normal diet. Milk is the center of the UNICEF program as its most needed food. It is supplied in both roller and spray types of skimmed milk to children over one year and as whole powdered milk for infants and babies up to that age.

The second feeding project launched in October 1948 called for 945,000 children and mothers as beneficiaries, and restricted its area to that territory south of the so-called 'Gothic Line' (roughly between Rimini on

the Adriatic Sea and La Spezia on the west coast).

With the increase of economic recovery in the North it was possible to concentrate relief in Central and Southern Italy. The advent of the second feeding program marked a change in the categories of beneficiaries and the beginning of the school mess feeding. 575,000 undernourished and needy children in schools over the country were given a hot, midday meal, this meal being, in many cases, the only substantial one the children receive. For the first time the general concept of the Fund was geared toward a program not entirely emergent but toward a plan for permanent benefits. 325,000 pre-school children and 9,000 kindergarteners, 31,000 pregnant and nursing mothers and 5,000 children in foundling homes made up the beneficiary personnel of this project which is now feeding more than a million children daily and in July will increase to include summer colonies in rural areas and at the sea-shore.

For the past year the Italian Mission has conducted a pilot project in Naples for the treatment with penicillin of 1,750 syphilitic mothers. It has now been decided to extend the program to treat 30,000 children and 15,000 mothers in Naples, Rome, and cities in Sicily.

The introduction of a large scale BCG (*Bacillus-Calmette-Guerin*) program for the prevention of tuberculosis in Italy is still under discussion with the Government. It has been agreed, however, that there will be a BCG program in the Island of Sicily and in the province of Liguria in the North on a demonstration basis.

The training program for pediatricians, public health doctors and nurses, and social workers has qualified 57 trainees for UNICEF fellowships in France, Sweden, Switzerland and the United Kingdom. Courses have included

observation tours to industrial cities, visits to children's hospitals, homes and clinics and a schedule of lectures by well-known authorities in the fields of child and maternal well-being of leading universities.

Approximately 162 tons of cotton and 126 tons of leather have been shipped to Italy by the Mission for processing and manufacturing into garments and shoes for 246,000 children in age groups 6 to 11.

Again with lasting benefits to children and mothers in mind UNICEF in Italy has

allocated more than a quarter of a million dollars for the purchase of milk machinery and in this way is assisting the Government to improve and enlarge the supply of milk. The expenditure of funds is likely to take the form of providing pasteurization machinery to improve the quality of milk and for the provision of one or more plants for the processing of dried milk. It is intended that Southern Italy particularly shall benefit by this program because of its conditions of need and the scarcity of milk.

TRAVEL IN EUROPE

Mr A. H. Boerma, Director of the European Office of FAO, and staff members of the European Office have now visited ten European coun-



Mr BOERMA and his colleagues with Mr VANICEK.
Mr TAUBER and other Czechoslovak officials

tries; namely, Switzerland, Czechoslovakia, Italy, Turkey, Greece, Portugal, France, Belgium, the Netherlands and the United Kingdom. The pattern followed at these meetings was the same in each country. The opening meeting was a formal gathering of the National Committee presided by the Minister of Agriculture or the Chairman of the National FAO Committee, the following days meetings were held by various sub-

committees on Statistics, Economics, Agriculture, Fisheries, Forestry, Nutrition and Information, Rural Welfare.

Every point of FAO's programme in Europe for 1949, and points for the programme for 1950 were discussed. Each country queried the programme and made suggestions according to its needs and wishes.

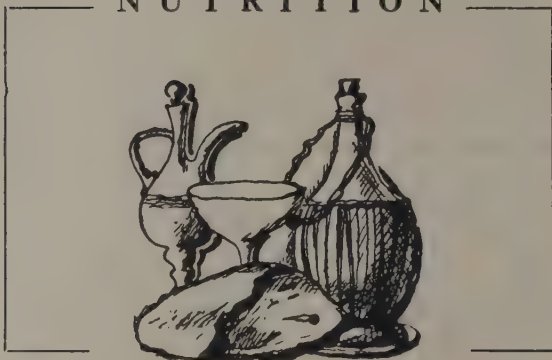


Mr BOERMA and colleagues welcomed to Turkey by H. E. President INONU and the Minister of Agriculture

The experience gathered at these visits will facilitate the coordination of FAO's activities with the respective national programmes.

ITEMS OF INFORMATION

NUTRITION



Nutrition and health aspects in Europe

Abstract from the 'Report on Nutrition and Health Aspects in six UNICEF countries in Europe' presented by Dr H.F. Helmholtz and Dr J.M. Latsky to the United Nations Economic and Social Council, 15 October 1948).

The countries visited by the writers were Austria, Hungary, Czechoslovakia, Rumania, Greece and Italy. It is reported that the food consumption levels in these countries are still below normal — in *parts* of these countries still dangerously below normal — requiring a methodical approach for a more balanced and rational dietary regime, to make up particularly for protein, calcium and vitamin shortages.

While it is not yet known to what extent the body can adapt itself to the need for any particular nutrient, the possibility of 'adaptation' in some form or other cannot be ignored. Stunted growth in children is quoted as a possible example of such 'adaptation'.

For a really effective examination of these problems, dietary surveys should be made according to age groups, regions, local dietary habits, occu-

pation and family income, etc. At the moment however, lack of funds and experts are preventing this type of work from being carried out.

The assessment of the nutritional status of any population group requires accurate data on body measurements (height and weight), dietary intake and standard of health (clinical examination and laboratory analyses, etc.), as a consequence of which it is not always easy to assess the value of data supplied by countries all employing different customs for nutritional assessment. In no country visited by the writers were the methods employed accurate enough satisfactorily to divide a child population group into : diseased, malnourished, and normal, as a result of which several other factors also had to be taken into consideration to assess the situation. In general, it was found that the very young children appeared to be better nourished than the groups round about puberty and adolescence, which are greatly in need of more attention.

Rickets, although present, has not assumed the proportions of the 1914-18 post-war period owing to the considerable progress made in the control of this disorder in the years which followed the first world war. The incidence of rickets may, however, be higher than is generally evident, since it often is a 'hidden' condition, e.g. stunted growth. Vitamin D, sunlight, calcium and phosphorus (milk, as the best source of calcium is very scarce in the countries visited) are necessary for healthy bone growth.

Scurvy was not mentioned as a real problem in countries visited although tests on a small sample of school children in Bucharest did reveal deficiency states.

Pellagra was encountered in acute form only in Eastern Rumania, where, as a result of the very serious famine conditions of 1945 to 1947, the disease is now more widespread. Since the condition is caused mainly by an excessive consumption of maize meal porridge ('mammaliga'), steps should be undertaken to encourage the addition to the 'mammaliga' of *Torula utilis* food yeast (which supplies the vitamin B complex) and milk

powder (for protein of high biological value) as these appear to be effective in combating the injurious effects of such a diet.

Although *tuberculosis* is not specifically a nutrition deficiency disease, its incidence and severity have increased in some areas as a result of bad nutritional conditions.

Because of the importance of milk, the writers studied the milk question in every country. Since the problem of stimulating milk production was fully discussed recently at a UNICEF conference in Paris, it was deemed unnecessary to go into further details in this Report. It is recalled, however, that pasteurized milk is a safe food for children only if kept cool and if consumed within 24 hours of pasteurization, which should be properly carried out. To be wholly safe therefore, even pasteurized milk should be boiled for infants. A very firm stand should be taken against the use of raw milk for young children.

In Europe the potato is important, particularly as a source of vitamin C, and the increased cultivation of the potato has undoubtedly contributed towards keeping down the incidence of scurvy in Europe.

Regarding *fruit and vegetables*, statistics are unreliable. It would appear though that some countries like Greece, Italy and Hungary, have benefited from the closing of the German market in that the internal consumption of fruit and vegetables has perforce increased. Also in the Balkan countries it would appear that vegetable consumption is on the increase.

A serious limiting factor still is the shortage of *fats*. A reasonable supply of fat is of material significance in the design of a diet for nutritional rehabilitation. Fats constitute a concentrated form of calories and provide valuable other nutrients to the body. Butter, margarine and animal fats are short in all the countries visited, except perhaps Hungary.

UNICEF food for children is being matched on a calorie basis by an equal, and often greater, number of calories from local supplies. The methods adopted vary in the different countries in matching UNICEF foodstuffs, but it was encouraging to note the efforts made by the countries concerned to improve supplementary feeding of children.

FAO nutrition work in Greece

(Extract of report submitted to the FAO Standing Advisory Committee on Nutrition, Nov.-Dec. 1948).

In 1948, Miss Andromache Tsongas, FAO Nutrition Consultant assigned to the Greek Government carried on her task of helping initiate and develop a nutrition program for the country. The main un-

dertakings were: (a) to demonstrate the need for a nutrition service and to show how such a service could function in a governmental program. (b) to incorporate as many of the FAO resolutions into the nutrition program of Greece as were possible in an effort to raise the nutritional levels. The services of the FAO nutritionist were made available to all groups and agencies — national and international — which were doing any work in the food and nutrition field.

One of the basic assignments was the planning of the national food requirements. This was done as a basis for import needs. In a country where almost half of the import expenditures are for food this was a very serious matter. In 1947-48 the national dietary was set at 2400 calories per caput at the retail level. The target for 1952/53 is 2650 calories. Education of administrators and the initiation of national food measures were necessary in an effort to have the national dietary as nutritious as possible on the money available, and to have it more equitably distributed.

Much emphasis was put on feeding programs for the vulnerable groups and the importance of planning these programs on a physiological need basis. The nutritionist participated very actively in the ICEF program, The School Breakfast program, and the Milk program. The latter two are heavily subsidized health measures aimed at reaching the children 0-18 years, pregnant and nursing mothers, tuberculous, and hospitals with some supplement, mainly milk. These programs were low in cost for those able to pay and free for those who could not. The ICEF program is planned to supplement the diet of 340,000 children and mothers.

The school breakfast which consists of a milk beverage made of dried skim milk and a raisin milk roll is aimed at reaching one million children.

Social Welfare Nutrition Problems demanded much time and detailed work. Family food lists were prepared for use in the cost of living index at the request of the group studying the rise in the cost of living and salary scales.

Education of both professional and lay groups was started. Nutrition propaganda was carried out through the radio, the press, the schools, with leaflets and group meetings and food demonstrations for mothers. In the schools a lesson on milk prepared by the nutrition service is to be used for all third grade children this year. Because of the inadequacy of staff, nutrition education of the public has centered largely around milk - the most important need.

The FAO Nutritionist took an active part on the sub-committee on nutrition of the National FAO Committee. Action of this committee on national nutrition problems such as school feeding, inclusion of 5 % soya in bread, etc., was started and will be

more effective when there is a national nutrition service to execute its decisions.

The establishment of a Nutrition Service has been recommended to the Greek Government.

Plans for such a service have started. The law establishing a national nutrition service has been prepared and is being reviewed by the legal committee before its presentation to Parliament.

□

In China, 117,000 children and expectant mothers are getting a free meal every day from the United Nations.

□

Finland derationed butter on 1 March and milk on 1 April 1949.

○

Mr Strachey, British Minister of Food, stated in a speech at Dundee on 6 March 1949 that the nation's calorie intake has almost reached the 1939 level. The amount available per person is now about 2,990 calories per day, as compared with 3,000 calories then. On the other hand the composition of food is different as the country is getting half as much milk, more bread, more jam, more fish and more potatoes, less sugar, meat and fat.

○

The Food Standards Committee in the United Kingdom was appointed in January 1948 and has already made recommendations for standards for Tomato Ketchup and Curry Powder. Work on these two standards has revealed the desirability of prescribing limits for the metallic content of the foods concerned. A Sub-Committee has been appointed to consider the effect of consuming foods contaminated by minute traces of metals or other injurious elements, and to examine the available evidence. The Committee is considering also the possibility of prescribing standards for Ice Cream, Processed Cheese, Iodized Salt, Edible Gelatine and Preserves.

□

The British Ministers of Food and Health acting jointly have made regulations which provide that all whalemeat imported for sale for human consumption shall be certified by a competent authority to show that it has been inspected and passed as fit and has been prepared and handled under hygienic conditions. The regulations came into force on 20 March 1949.

□

The rationing of all chocolate and sugar confectionery in Great Britain ended on 24 April 1949. The existing regulations governing price control

and the licensing of manufacturers, wholesalers and retailers remained in force.

○

Unrestricted sales of milk for liquid consumption in Great Britain have been allowed as from 22 March 1949. Domestic consumers and caterers will be able to buy as much milk as they like, subject to the retailers' obligation to supply all priority entitlements first.

□

The Irish Government as from 15 January 1949 has decided to permit the production of a limited amount of 75 % extraction flour in addition to the present 85 % extraction. The prewar extraction was 70 %. The 75 % flour and the bread produced from it will not be subject to subsidy, which now stands at 10 million pounds annually for the milling and baking industry in Ireland. It is expected that the forthcoming arrangement will substantially reduce this amount.

○

At the end of 1948, in Poland the Council of Ministers decided to abolish food rationing. There is also a drop in food prices. Sugar now costs only 175 zloty per kg, oil instead of 575 costs 350 zloty per litre; soap, beer and some textiles are also cheaper.

○

After more than eight years Sweden abolished the rationing of butter and fats on 24 March 1949.

A G R I C U L T U R E



Grasslands in Ireland

(Communicated by the Irish National FAO Committee)

Of the 11½ million acres under crops and pasture, about 2½ million acres are under tillage crops and the remaining 9 million acres of grass comprise about 7 million acres of pasture and some 2 million acres of grass from which hay is taken.

Grassland is the main source of fodder — in the form of summer pasture and of hay for winter keep — for cattle, sheep and horses and therefore provides the raw material of some of Ireland's most important exports. Farmers have learned from experience that tillage crops cannot be raised successfully without the aid of fertilizers. They have not, however, fully realized the need for adequate manuring of grassland and for generally treating grass as a crop. Even in pre-war times Irish farmers used insufficient quantities of fertilizers and during the war years fertilizers were practically unobtainable. The result is that the drain of phosphates from the soil caused by cattle raising and milk production has not been counterbalanced by an adequate input of fertilizers. The fertility of grasslands has therefore been steadily impaired. It is a primary object of Government policy that land fertility should be raised.

There is a considerable area of grassland in the country which, due to inadequate drainage, is producing only a fraction of what it might. Experiments and soil tests have shown that lime deficiency is also a major limiting factor in the production of good pasture in many areas of the country. There are, in addition, many areas where through gradual loss of lime from the soil a state of 'near deficiency' exists.

Much of the existing pastures which have fallen into a state of low productivity may be improved considerably by draining, liming, adequate manuring and systematically controlled grazing.

Government assistance to farmers for the promotion of land improvement by draining, liming and manuring is now being made available on an unprecedented scale through the medium of a comprehensive ten-year Land Reclamation Project estimated to cost £ 40 million. As a result of this Project the productivity of Irish land should be raised to a very marked extent in a relatively short period.

Hill Farming Act in England and Wales

Under the Hill Farming Act, 1946 financial assistance can be given to owners and occupiers of hill farms who are willing to carry out schemes for the improvement of their land. Grants amount to one-half of the cost of the work done under approved schemes, which must be sufficiently comprehensive to ensure the proper rehabilitation of the land for hill farming purposes. They may cover a wide range of improvements, such as the repair and modernization of farmhouses, cottages and farm buildings, the building of new cottages

and farm buildings, the construction or improvement of roads and bridges, the provision of water and electricity supplies, the improvement of grazings, drainage, fencing and the planting of shelter belts.

By the end of 1948, no less than 1,951 proposals for improvement schemes had been put forward in England and Wales. Of these, 989 had been approved in principle, subject to the submission of documents for formal approval, 17 formally approved, 506 were still under consideration and 439 had proved unsuitable and had either been withdrawn or rejected. The position for England and Wales separately was as follows:

	England	Wales
Proposals	625	1,326
Approved in principle .	288	701
Formally approved . .	6	11
Under consideration . .	178	328
Unsuitable (withdrawn or rejected)	153	286

The 1,512 'live' schemes (excluding those withdrawn or rejected) relate to 1,968 holdings, with a total area of about 611,000 acres, and represent about 10 per cent. of the total number of hill sheep farms in the country. The total cost of the work under them is estimated at about £ 1,711,000. Improvements to farm buildings account for the largest proportion (about one-fifth) of this sum, while next in importance are work on farmhouses and cottages, and the improvements of grazings (reseeding, manuring, &c.), both of which represent about 15 per cent. of the total. Other important items are fencing, roads and bridges and drainage.

The cultivation of citrus fruits in the U.S.S.R.

Despite their great economic importance, citrus fruits, were rarely cultivated in prewar Russia and little attention was paid them. Lemons, oranges and tangerines were imported from abroad. Citrus fruits were cultivated for the first time in Adzar, 300 years ago, but by 1913 only 160 ha. of land along the Black Sea coast were planted with such fruits. In 1931 a specialized trust of state farms concerned with the cultivation of lemon and orange trees was created with nurseries for the cultivation of seedlings. In one year ten state farms were organized and 1000 ha. of land planted with citrus trees. The Soviet Government provided the collective farms and farmers with a long term credit for the creation of citrus plantations, and in 1940 the area covered by citrus trees exceeded 20,000

ha; 60 % of all collective farms now have their own citrus trees.

Cultivation of citrus fruits in other parts of the Soviet Union has only recently been started. In the Krasnodar area in the Soc and Adler region there are about 200 ha. and in Azerbedjan S.S.R. about 50 ha. of citrus trees. Till recently it was believed that citrus fruits could only be grown in the best regions of Adzar. It appears, however, that the trees thrive quite well in the colder region of the Abchaz S.S.R., in the Krasnodar region, on the Crimea, in Azerbedjan, in the Odessa region of the Ukraine and in the republics of Central Asia.

Dwarf types of lemon and orange trees are recommended and about 1,300 to 3,300 are planted per hectare. These dwarf trees are about one or one and a half metres high, when thickly planted, they suffer less from wind and quickly renew their crowns after frosts. At the experimental station at Soc the yield was up to 360 oranges per tree. These dwarf cultures are very successful in subtropical regions of the Krasnodar district and the Azerbedjan S.S.R. (lemons and oranges) and in the coastal districts of the Crimean peninsula (oranges and tangerines).

Also creeping types of lemon and orange trees have great possibilities and their fruit ripens three to four weeks earlier than that of the others. The lemons do not suffer from cold winds and stand safely under the cover of snow in temperatures as low as 10 to 12 degrees below zero. In Soc a yield of 520 fruit per tree was reached. Also in Suchum good results were achieved. The cultivation of creeping types is recommended for subtropical regions of the Krasnodar district and the Azerbedjan Republic and on the Crimean coast oranges and lemons of this type can be cultivated. (IAI Bulletin, Vol. II, No. 1)

The organization of gathering and treating medicinal herbs in Bulgaria

Medicinal herbs which thrive under the most varied climatic and geological conditions form one of Bulgaria's various natural resources. In the lowlands and highlands, the river valleys and the sea coast, valuable medicinal substances are stored up in these plants.

Owing to the favourable conditions, Bulgarian herbs are of excellent quality (belladonna, valerian, camomile, henbane, woolly digitalis, cowslip, cantarion, menta piperita, and many others). The healing qualities of these plants have already been known for a long time to the Bulgarian people, but it took a comparatively long time to organize their gathering. They were exported for the first time in 1934. The

processing of medicinal herbs was on a low level in Bulgaria. They were gathered by individual persons without plan and without consideration for their conservation and expansion. Consequently, a great number of herbs were nearly wiped out.

After transferring the gathering of herbs from private hands to official control, this trend has been stopped, and the growing of these plants all over the country on a scientific and economic basis is being planned and directed from one central office.

The country is divided into 45 herb districts. Each of these is headed by an expert on medicinal herbs, and equipped with a sufficient number of collecting stations, of which there is an approximate total of 500 in Bulgaria. For the first time, regulations have been worked out on the gathering of medicinal plants which define the rights and duties concerned.

A staff of inspectors and instructors was set up at the central office which consists of 13 experts. At the time of the harvest of medicinal plants, these experts travel all over the country and organize on the spot the gathering, drying, and packing, etc., as well as the storage of these plants in the State warehouses. Nearly all local mass organizations, school children and others have joined in the gathering of herbs. Special brigades are working for that purpose and are achieving good results.

The Five Year Plan foresees the cultivation of new medicinal herbs, and the extension of the area of the old ones, like belladonna and valerian.

From medicinal herbs all kinds of extracts, tinctures and other medical preparations are produced in Bulgaria. In addition, medicinal plants serve also for the production of medicines proper, like adinorm, digipan, diginorm, etc.

(IAI Bulletin, Vol. II, No. 1)

Agricultural education in Czechoslovakia

(Based on Annual and Progress Report of Czechoslovakia to the Fourth Annual Conference of FAO, 1948).

In Czechoslovakia, there are three University Schools of Agriculture (in Prague, Brno and Koice), with agricultural and forestry faculties; in addition, 32 agricultural schools of a superior type, 313 lower agricultural schools and 4 other agricultural schools. Agricultural schools, including special ones for gardening, horticulture, viticulture, fishery, distillery, cooperative schools and other, total over 350.

The Czechoslovak Academy of Agriculture, founded in 1924 as a Czechoslovak agriculturists' centre, is the supreme national scientific institution,

collecting and organizing ethic and financial forces throughout the country for the development of agricultural science and its practical application. The Slavonic Agricultural Library, one of the largest European agricultural libraries, is attached to this Academy. The Ministry of Agriculture in Prague is the centre of all activities connected with agriculture's improvement and development, cooperating closely with the Unions of Czech and Slovak Farmers united in the Central Council of Czechoslovak Farmers.

The chief institution for all agricultural and forestry research is the Association of Agricultural Research Institutes in Prague.

Bohemia's agricultural research centre is the Agricultural Research Institute in Prague, those of Moravia and Silesia, the Provincial Agricultural Research Institutes in Brno and the State Agricultural Research Institutes in Bratislava and Kosice. Many research and experiment stations work in different areas, *e.g.*, the Potato Research Institutes, stations and institutes engaged in experimental work and research on hops, wine, bees, fisheries, tobacco, etc. Czechoslovakia has more than 60 agricultural research institutes, over 50 experiment stations and about 30 special experiment stations.

○

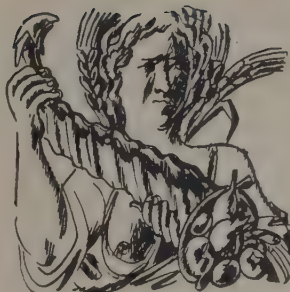
The Bulgarian Cabinet has approved the creation of a special Academy of Agriculture to be attached to the Sofia University, which will have in addition separate Faculties of Agronomy, Veterinary Medicine, Forestry and Zootechnics.

□

Rumanian farming is more and more making use of advanced technique and of advanced methods of tilling and crop cultivation. To acquaint farmers with the use of modern machines and tractors practical courses and expert agricultural schools will be introduced. Agricultural schools have already been set up at the State farms Halchiu and Stupini in the Braslov district. (IAI Bulletin, Vol. II, No. 2)

○

Recent experience has shown that FAO experts working in a far-away country may at the same time be of use to other countries. So, for instance, tea seed collected from the plains of Anhwei Province and the hills of Fukien Province in China was sent to Yugoslavia, who had requested from FAO tea seed adaptable to her climatic and ecological conditions. Similarly chestnuts of a blight resistant strain found in China were sent by air to Italy for experimental planting.



IEFC rice allocations for first half 1949

Rice available for export during the first half of 1949 again will fall far short of meeting the stated requirements of major consuming countries. Shipments will be only slightly larger than during the first six months of 1948. As was the case then, supplies for the first half 1949 will meet only about half of stated requirements.

These facts appear in the recommendations for distribution during January/June 1949 of 1,875,300 metric tons of rice submitted for the approval of governments by the International Emergency Food Committee of the FAO Council.

The total is about 75,000 metric tons larger than the amount allocated for the first half of 1948. It represents about 45 per cent. of the amount of rice which was imported by the claimant countries in a comparable period before the war.

A 'token' allocation of 244,600 metric tons is also recommended for Europe. The figure includes a balance of about 65,000 tons carried over from 1948.

The distribution to Europe will be under a 'block' allocation system. That is, under the IEFC recommendation a supplying country may ship to any importing country holding an allocation, up to the limit of that allocation. Conversely, the importing country may buy from any of the supplying countries up to the limit of the allocation.

IEFC recommends allocation of 1948-49 world cocoa bean supply

The International Emergency Food Committee of the FAO Council proposed to participating countries a provisional allocation of 703,670 long tons of cocoa beans for the cocoa year ending 30 September 1949.

This new allocation, worked out by IEFC's Cocoa Committee in London and forwarded to IEFC in Washington for approval and transmittal to governments, revises the Committee's interim allocation of October 1948. It is 'provisional' only and subject to finalization later in the year; and is also subject to the decision of the FAO Council's Paris session in June as to continuation of allocations beyond 30 June.

The total of 703,670 long tons exceeds the October estimate of 600,000 tons, because of higher production in the Gold Coast area than was expected owing to the swollen shoot disease incidence there.

The Committee emphasizes the need to safeguard existing cocoa growing areas in the Gold Coast, the world's largest single producing area.

A Commission of Enquiry into the Swollen Shoot Disease of Cocoa in the Gold Coast, appointed by the United Kingdom Government in consultation with FAO, reports the disease problem to be 'no minor foray, but a full scale invasion which has already left the choicest cocoa producing land devastated and derelict'.

Government purchase and distribution of seeds in the United Kingdom discontinued

It has been decided that the purchase and distribution on Government account of agricultural and vegetable seeds for sowing in the United Kingdom is to be discontinued.

Subject to current commitments, the executive and advisory functions of the Seeds Import Board regarding the supply, distribution, importation and exportation of seeds will lapse in the Spring of 1950, and the Board's last purchases will be from the 1949 crops.

Imports of seeds from the 1950 and subsequent harvests will be made through ordinary trade channels under licences issued by the Board of Trade in consultation with the Ministry of Agriculture and Fisheries.

The Seed Production Committee containing representatives of the National Farmers' Union, the Seed Merchants and the interested Department will continue in being and will keep under continuous review the prospective requirements and supplies of seed, both home produced and imported.



International Sheep-breeding Congress of the Mediterranean Countries

The Congress was convened by the Italian Breeders' Association in collaboration with other associations interested in sheep-breeding, such as the Italian Dairy Federation, and was sponsored by the Italian Government. The Congress was held

in Rome from 4-7 April 1949. At the Congress nearly 400 participants took part, 85 of them from foreign countries. Nearly all the Mediterranean countries were represented, and even other countries which do not belong to this area sent delegates. Official delegations came from Algeria, Egypt, France, Greece, Iran, Lebanon, Portugal, Spain, State of Israel, Switzerland, Turkey, the United Kingdom.

The Italian Government showed a great interest in this Congress, which was attended in its opening session by Mr de Gasperi, President of the Italian Government, and by other members of the Government, among them the Minister of Agriculture, Mr Segni, and the High Commissioner for Food, Professor Ronchi, who was also the Chairman of the Organizing Committee of the Congress. As Chairman of the Congress, the Duke Vincenzo Riviera, Italy, and Mr A.H. Boerma, Director of the European Regional Office of FAO were elected. Vice-Presidents were the delegates of Egypt, Portugal, Spain, Turkey and France. In the closing session, the Congress adopted the following resolutions:

I

The International Congress on Sheep-breeding in the Mediterranean countries,

Whereas it is evident, from examination of the basic agricultural, industrial and trade interests of Europe, as regards its rehabilitation and particularly its ever greater need to increase employment opportunities and supplies of foodstuffs and industrial raw materials, that the protection and development of sheep production should be allocated an appropriate place in economic reconstruction programs;

Considering the importance of sheep breeding in the economy of Mediterranean countries, in regard to the specific economic, agrarian and social conditions, especially in the southern Mediterranean zones;

Noting also that the ever increasing tendency to intensify agricultural production reduces the grassland area, but that in this process of intensification sheep-breeding may still be included, even on a stationary basis;

Noting lastly that the output from sheep-breeding could be greatly improved and that, to this end, besides the usual protection and propaganda measures, efforts should be made to reduce upkeep costs by means of coordinated technical and economic action;

Recommends

(1) *That*, in carrying out land reclamation programs, account should be taken of the necessity for harmonizing the needs of an increased agricultural production with those of maintaining sheep stocks - in many regions linked, *inter alia*, with

the living conditions of the mountain population - and that these said programs also ensure allocating adequate areas utilizable for grazing, which should be improved by suitable technical means so as to permit smaller areas carrying a higher number of sheep ;

(2) *That*, with a view to increasing production and yield in sheep-breeding ;

(a) breeding practices and the economic aptitudes of sheep be improved, particularly through the methodical use of genetical selection, by encouraging a wider application of performance tests, and by adopting testing methods standardized on an international level ;

(b) forage supplies be increased and rational systems of stockfeeding be made more general ;

(c) hygienic and sanitary conditions be improved by the systematic control of sheep diseases in every country and on an international basis, in agreement with and supported by the International Epizootics Office in Paris ;

(3) *That* breeders and processors of milk, wool and pelts establish close liaison with a view to fostering the technical and commercial valorization of sheep products and also the standardization of the methods for grading these products ;

(4) *That* measures tending to improve the standard of living, instruction and education of shepherds be taken.

II

The International Congress on Sheep-breeding in the Mediterranean countries.

Recognizing that the expansion and improvement of sheep production necessitates the grouping of breeders into associations enabling them to participate directly in carrying out a program for protecting the technical and economic interests of the sheep-breeding industry ;

Considering also that production problems in the countries represented at the congress have many common aspects, necessitating the establishment of relations for effective and ever closer collaboration on an international level to carry out specific projects ;

Requests

Breeders to encourage and expedite the setting up of such national associations in the countries where not yet established ; and

Recommendations

That a sheep-breeding Committee be set up within the proposed European Animal Production Association — which may eventually include the non-European countries of the Mediterranean Basin — the purpose of this Committee being to deal with the technical and economic problems inherent in

the development and improvement of the sheep industry ;

And that the FAO of the United Nations continue its praiseworthy activity to augment the efficacy of research and experiment institutes in different countries, by establishing close liaison also for the principal problems regarding sheep-breeding and correlated agricultural questions.

III

The International Congress on Sheep-breeding in the Mediterranean countries

Appreciates the initiative taken by wool producers in the three important British Dominions — Australia, New Zealand and the Union of South Africa — in order to further the consumption of wool throughout the world ;

Invites the breeders' associations, the scientific institutions and experiment stations for animal production of the Mediterranean Basin to establish relations with the International Wool Secretariat in London, either direct or through its National Committees, where these exist, in order to ascertain the means of improving and increasing wool production and of making the consumer better understand the unique qualities of wool.

The International Congress on Sheep-breeding in the Mediterranean countries

Resolves

To transmit the resolutions voted by the Congress to the FAO of the United Nations for consideration, requesting this Organization to forward them to the Governments of the countries concerned.

World Brucellosis Centre

It is expected that a World Brucellosis Centre will shortly be set up by WHO, to collect and disseminate information to workers engaged in research. Among the subjects of particular interest are the detection of brucellosis in man and animals, the incubation period and the modes of communication. The efficacy of various types of vaccine, whether of live or killed organisms, the value of methods of treatment such as serum treatment, protein shock therapy, and intramuscular injection of brucellin, should also be studied. According to recent data, combined streptomycin and sulfadiazine treatment has given satisfactory results in certain cases. It would be advisable to estimate the results of the vaccination of exposed persons and of healthy herds, as well as of infected persons and animals.

Brucellosis constitutes a grave threat to livestock, thus causing a serious loss of meat products and having economic repercussions which must be taken into account. As this disease affects both

the health of man and production of food, WHO has approached FAO so as to collaborate in studying those aspects of the problem which are of interest to both organizations.

Near East Foundation Program in Greece

The Livestock Improvement Program of the Near East Foundation in Greece is continuing in 1949. The immediate objective is to provide a legislative basis which will make it possible to enlist a wider collaboration of the local cooperatives in the field work. It is also planned to extend the membership in the existing National Committee for Livestock Improvement to farmers' representatives in order to secure their help in forming the program.

Artificial insemination is being carried out in Athens and Salonika areas where, up-to-date, a total of 24,636 first services will, it is estimated, result in the birth of some 13,908 calves.

Demonstrations with vetch planting have given satisfactory results, as it resisted the last severe winter better than oats. Near East Foundation officials advise farmers also on dairy barn and milk house construction, and conduct a census of the different classes of livestock in the villages where operations are underway.

Fight against foot-and-mouth disease

No one knows how much food is lost as a result of animal diseases. Man uses animals for meat, to produce milk, butter and cheese and to cultivate and fertilize his fields. On account of the cattle disease mastitis, for example, it is reckoned that Europe loses five million metric tons of milk every year — enough to give over 30 million babies half a litre of milk a day. Brucellosis causes even heavier losses than mastitis in many countries of Europe, yet both diseases could be controlled and practically eradicated at a comparatively small cost. And many a small farmer, in many parts of the world, who watches his few animals sicken and die, faces starvation.

FAO constantly seeks new weapons to use in this battle for bread which is to ensure sufficient food and better food for the two thirds of the world who have never had enough to eat. Rinderpest, the 'black plague' of Asia and Central Africa has been dealt a death blow by interested governments with the help of FAO experts who recently

perfected a vaccine which protects animals from this scourge.

Another problem, however, has appeared in East and South Africa, in the form of a new strain of foot-and-mouth disease. It is highly contagious and to date there is no known vaccine to combat it. Small wonder then that no country has wanted to take the risk involved in setting up a laboratory to work with this virus, for fear that it will get out of hand. No single country wants to make the decision as to where such a laboratory or laboratories should be. All the countries in the area, however, are eager to get started on research work to fight this new threat which is no respecter of national boundaries, and have offered funds to finance research and the production of vaccines.

They realize that the job has to be done on an international scale and they have appealed to FAO to assist. As a result of an informal discussion held in Nairobi on foot-and-mouth disease, following the Rinderpest Meeting in November 1948, FAO has called upon the services of Dr Ian A. Galloway, head of the Foot-and-Mouth Disease Research Laboratory in Pirbright, England, who had already advised the United States on the disastrous outbreak which occurred in Mexico recently. Dr Galloway has left for Africa, where he will spend three months surveying the situation.

A sample of the unknown virus was sent to Dr Galloway from Africa last year. He analyzed it and discovered that it was a new type of foot and mouth disease. He tried the vaccines used on other types but they proved of no value.

Consequently FAO is calling a meeting to be held in London next August, which will train all available weapons of science on one single enemy: foot-and-mouth disease. FAO hopes to evolve a system of exchange of information among research laboratories which will dovetail the work and speed up research. The usual period of waiting, which normally occurs when a research laboratory waits before publishing a paper, will thereby be eliminated.

It is well recognized that the health of livestock is one of the essential requirements for increasing food production. This fact is seen in the individual country, and it is even of greater importance throughout the world as a whole. By the form of collaboration in view, universal in character, FAO will contribute towards the fulfilment of one of its final objectives — raising the standard of living for all.

□

A new drug has been discovered by the Imperial Chemical Company which is named 'Antrycide' and which cures trypanosomiasis of cattle. It is claimed that this will make 4.5 million sq. miles of Africa safe for cattle raising.

Teschen disease

In Czechoslovakia last year, some 150,000 pigs died of disease. This one — called after the Czechoslovak province where it first emerged — the Teschen disease, paralyses the muscles of pigs, just as polio does these of humans. The disease spread to neighbouring districts and grew into an acute menace to livestock raising, to agriculture and to the food supply. Ruthless slaughter of infected animals is the only preventive now known and the countries bordering Czechoslovakia had to resort to this method in order to prevent the spread of this disease into their areas. Czechoslovak scientists are experimenting with vaccines.

Last fall FAO convened a veterinarian meeting in Warsaw, Poland, where the fight against the Teschen disease was taken up on an international scale. One FAO veterinary scientist is at present assigned to Poland to continue this work. But what seems to be very important is that this pooling of expert knowledge may also be of use in the fight against infantile paralysis. In spite of extensive research, little more is known about this disease than about the Teschen disease. The large-scale use of experimental methods with animals — which is unthinkable with human beings — may contribute to better understanding, and perhaps to a cure for human polio; and so save the lives and health of many little children.

Bee-keeping in France

The following particulars on bee-keeping in France have been taken from a report presented by Mr Vayssière to the Academy of Agriculture of France (meeting held on 8 December 1948).

The author first of all notes with regret that practically no research work is carried out on apiculture in France although there are about 1 million hives each producing annually 10 kg. honey and a proportional quantity of wax. He recalls the useful work done by bees in pollinating certain plants.

In 1941, the Food Supplies Services and the Fats and Oils Industries Services asked the author, respectively for honey and wax, how to remedy the shortage of official services in this sector, with the object of increasing production.

With the assistance of the Director of the Biology and Microbiology Laboratory of the Central Research Bureau, the author arranged meetings with the representatives of producers in order to draw up a program based chiefly on scientific research. On 6 June 1941 the author sent the Minister of Agriculture and Supplies a report which was unanimously passed and which, *inter alia*, provided for the establishment, in the Parisian region,

of a station for apicultural research work, independent of the existing Entomological Stations, and directed by a specialist. Only in 1948 did the author learn the decision of the Ministry of Agriculture — which he considers as a 'deferred follow-up' to his report — to set up a Laboratory specialized in this research work. It is pointed out, however, that the Laboratory is not yet completely staffed nor equipped with all the material required. The author adds that the bee-keeping situation is not any better in the overseas territories, and calls the attention of the competent Services to the necessity of organizing research work on a rational and lasting basis.

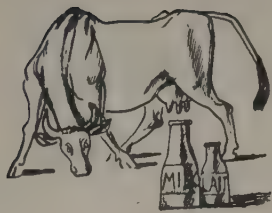
It should be noted that a private French bee-keeping association has recently established a scientific section.

At the end of Mr Vayssière's report, Mr Lemoigne, Chairman of the Permanent Committee of the National Institute of Agricultural Research, states that this Institute has supported all requests for the development of apicultural research. Mr Frons reports the resumption of activity and the re-organization of the Central Society of Apiculture located in Paris, and the re-establishment of the courses taught in Luxembourg. Mr Trouvelot indicates the progressive execution of a research program which is being carried out partly by the Ministry of Agriculture and partly by the National Institute of Agricultural Research. Studies concern possible poisoning of bees by some pesticide treatments of plants; the part played by pollens in the food of bees; identification of honeys; behaviour of bees; role of bees in the fertilization of oil-yielding crucifers; survey of the breeds of the black bee; establishment of breeding hives; control of fowl brood, etc.

Birch silkworms

At the experiment station near Gorki in U.S.S.R., scientists have succeeded in breeding the silkworm on a quite common Russian birch. Hitherto the silkworm in the U.S.S.R. was bred only in Central Asian republics, in the Caucasus and Southern Ukraine, the only places where mulberry trees thrive. In China and Japan oak silkworms have been bred for a long time. Thirteen years ago some cocoons of this silkworm were brought to the Soviet Union and adapted themselves quickly. However, the oak does not grow everywhere, whereas the birch is the most common Russian tree. When scientists tried to feed the oak silkworms on birch leaves, the experiment succeeded. In 1946 near Vitebsk 50 families of oak silkworms were bred, and fed on birch leaves; 8,000 cocoons resulted. Each cocoon contains from 500 to 700 metres of first class fibre.

(IAI Bulletin, Vol. II, No. 2).



Outline of the organization of the Swiss dairy industry

(Sent by the Swiss National FAO Committee).

I. GENERAL POINTS

The Swiss dairy organization is not alternately national economy or private economy, but since at least 1932, consists of a kind of collaboration between the State and private initiative. By private initiative is meant all firmly established professional associations. This collaboration does not ensue from agreements concluded on a political basis; rather it has become organic as a result of economic needs and coercive techniques. The organization of the Swiss dairy industry is autochthonic, without foreign influence. This declaration is not presumptuous, as the forms of organization of the dairy industry date back, in the aggregate, many centuries. Alpine management, which is the basis of the Swiss dairy industry, has, from very remote times, rested on cooperative collaboration. This cooperation became more marked at the beginning of the XIXth century when cheese-making gained ground in the lowlands following the improvement in forage crops. This was the starting point for the dairy industry and the rise of the export trade in cheese and preserved milk.

Up to the first world war, the trade in milk and dairy products did not, in general, go beyond the local cooperative limits. It was only later, during hostilities, that the cooperative societies and private firms grouped together into extensive associations, which first coordinated their efforts, subsequently seeking collaboration with the State.

The following dairy organizations are now established in Switzerland:

1. *Central Union of Swiss Milk Producers*, founded in 1907, one of the most important organizations of Swiss farmers. It groups 17 regional dairy federations, composed of local cooperatives. Approximately 95 per cent. of the owners of cows are members.

2. *Swiss Milk Buyers' Union*, founded in 1917, with 1600 cheese factories in the plain, which are run either privately or cooperatively, and bound by contract to the cheese exporting organization.

3. *Swiss Cheese Trade Union*, established in 1914 under another name, groups some 70 cheese exporters. It undertakes important semi-official duties in connection with the fixing of milk prices.

4. *The 'Butyra', Swiss Butter Supply Centre*, founded in 1932, comprises the butter plants, national butter wholesalers and butter importers, and because of its competence, is also semi-official in nature.

5. *The Cheesemongers' Rebate Association*, founded in 1915 under another name and comprising wholesale merchants in national cheeses.

There are also other professional organizations connected with the dairy industry, namely: Swiss Union of Soft Cheese-makers, the Society of Savoury Herb Cheese-makers, Milk Retailers' Union, etc. These do not play an important part in the organization of the dairy industry. On the other hand, the preserved milk manufacturers are not organized, but conclude agreements as the need arises.

The climatic, geological and topographical conditions are favourable to forage crops and cattle-breeding. Naturally, therefore, dairy cattle-raising is one of the chief branches of farming.

II. COLLABORATION WITH THE STATE DURING THE WAR

After an apparent transitory prosperity during the first world war, the Swiss dairy industry was seriously affected by the widespread economic depression which marked the subsequent period. The export prices for cheese and preserved milks dropped, mainly because of the excessively high monetary value of the franc, to such a low level that the milk producers could no longer be guaranteed a price covering the cost of production. To avoid the ruin of Swiss agriculture, the State was obliged to intervene through subsidies which totalled 220 million francs during the period between the two wars. The granting of subsidies was obviously subordinated to certain legal conditions, aiming at controlling production and consequently at restoring a fair balance between supply and demand. This control, however, was not carried out by the State itself, but entrusted to the principal organizations, the State reserving the right of supervision.

As a result, the Swiss dairy industry disposed of a complete production system and organization methods had well advanced by September 1939, when the second world war broke out. This enabled the industry from the first to undertake functions of primary importance with a view to ensuring the provisioning of the country under war conditions.

On 1 September 1939 the Federal War Office for Food Supplies was thus able to conclude agreements with the Central Union of Swiss milk produ-

cers and other organizations of the dairy industry, aiming at ensuring the supply of milk and dairy products during the mobilization period. This close collaboration between the dairy organizations and the war administration ceased when the war ended.

Before the war, Swiss agriculture produced 28 million quintals of milk, of which some 20 million were put on the market. On comparing production and price fluctuations during the two world wars, appreciable differences will at once be noted. While, between 1914 and 1920, production dropped by over 30 per cent. and the price of milk doubled, from 1939 to 1945, there was a reduction in production of about 20 per cent. and the prices did not increase more than 60 per cent.

Despite the considerable extension in crop cultivation, Swiss agriculture, through constant effort, succeeded in preventing too marked a decline in animal production and particularly in milk output; this was an excellent achievement which benefited the food supply of the country. From 1939 to 1945, the number of milch cows diminished by about 120,000 head, corresponding to a reduction of 13 per cent. compared with prewar years. From 1914 to 1920, numbers dropped by 200,000, namely 21 per cent.

It should be noted that in 1914, the milk producers' federations had not yet been fully developed; on the other hand, the Central Union of Swiss Milk Producers was not adequately organized and did not have the requisite funds to carry out its task successfully. The regional federations chiefly felt the lack of urban processing dairies and butter plants, able to ensure the supplying of fresh milk and the manufacture of the surplus milk into dairy products. It was during the period between the two wars that the dairy federations consolidated their position by setting up their own dairies and creameries. What is more, and this is the difference with 1914, the Federal authorities, by creating the price control office some years before 1939, from the onset of the war disposed of an administrative system capable of governing price trends equitably.

The Swiss milk producers comprise farmers both in the plain and in the mountain regions. Those in the plain are organized into cooperative milk or cheese societies which, in turn, are grouped into 17 regional dairy federations. These form the branches of the Central Union of Swiss Milk Producers. In general, there is at least one cheese dairy for each commune. The milk is delivered by the producers, then processed into dairy products or sent to the urban centres for consumption in the fresh state. In making first quality Swiss hard cheese (Emmental, Gruyère, Sbrinz or Tilsit),

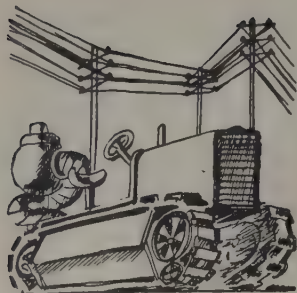
the milk must be thoroughly fresh; in other words, the milk collecting area should not be too extensive. In most cases, the cheese factory is owned by the dairy association which hires a cheesemonger to operate it, or, more often than not, leases the plant with all the technical equipment to a professional cheese-maker, who processes the milk at his own risk. The milk producers are not obliged to join the local dairy or cheesemongery association. Under war conditions, however, the authorities ordered the compulsory delivery of milk. It may be recalled that 95 per cent. of the producers were already grouped before the last war. When, in a commune, the greater part of the producers is federated, the other milk producers may be induced to become members, in conformity with special legal provisions.

Although the abrogation of the war regulations inevitably led to a certain relaxation of control, it is not likely, however, that complete liberty of action in milk production will return. In fact, price guarantees can hardly be conceived without production control. It matters little whether this control is exercised by the State or by professional associations.

In the mountain regions, organization follows the same lines except that the cheese factories are only operated in the summer. Normally, the dairy products prepared in these regions are reserved for the producers' own family needs. These Alpine cheese-mongeries are also, for the most part, grouped into associations without, however, belonging to a national association, seeing that their products are intended for direct consumption or else marketed locally.

During the war, all the principal organizations, that is, the Central Union of Swiss Milk Producers and its regional branches, as well as other agricultural and dairy industry bodies, made every effort to ensure the provisioning of the country. By virtue of Federal ordinances, they were assigned different functions in the rationing scheme. The results obtained to date prove the expediency of firmly established professional organizations for Swiss public economy.

Although the rationing measures have been discontinued, the compulsory delivery imposed on producers and processing undertakings has been maintained up to the present. As in the past, the pivot of post-war market control will consist in the purchase of milk and dairy products, on a contract basis, by professional organizations at guaranteed prices. The new agrarian law now under examination, will accentuate the influence of the State primarily in indirect measures concerning production and marketing.



Agricultural machinery stations in Denmark

By HANS J. PETERSEN, Odense. Adviser on machinery to the Agricultural Association of Funen.

Machinery stations are a modern method by which machines and implements may be used in common. A distinction may be made between cooperative machinery stations, private machinery stations and, further, an association of a limited number of farmers who own a machinery park in common.

Cooperative machinery stations are established in such a way that each interested farmer, before the station is started, binds himself on becoming a member to use the machinery for a certain number of working hours and in advance pays an amount of Kroner 5.00 per registered working hour. Further, the contract is provisional for 5 years. The farmer pays in all an amount of about Kroner 8.00 per working hour for the use of the machinery. Cooperative machinery stations are in charge of a managing committee which engages the necessary hands to attend to and operate the machines.

Private machinery stations are established by private persons who operate them as a business. They endeavour through a high standard of efficiency to secure a circle of customers and to develop their machinery park accordingly. A large number of private machinery stations are owned by farmers who have their own holdings and only undertake so much work outside them as time and material will allow. Some of these stations however are of considerable size, and may even be termed contractor's businesses, having a very comprehensive machinery park so that their people can be employed all the year round. Either a fixed fee is paid per hour for the work performed, or a price is agreed upon for each acre of land. The owners of private machinery stations have formed a national association and are cooperating with the agricultural associations in, for instance, the fixing of prices for the work, the setting up of an arbitration tribunal, etc.

The common use of a machinery park by a limited number of farms is in practice carried out along different lines. The farmers may, for example, be the joint owners of a so-called tractor set with accessories (tractor, plough, harrow and binder). There are examples of groups of farms, four of about 30 ha. each, 13 of 20-25 ha. each, 10 of from 15-20 ha. each owning such a set in common. In the case of the four farms the fixed expenses, such as for instance the payment of debt instalments and interest on a loan, are divided equally between the farms, and the working expenses are made up every quarter, then apportioned to each member according to his number of tractor hours. A permanent tractor driver is employed, and the farmer for whom he is working pays him the same wages as a day labourer. This form of tractor ownership may reduce the expenses of maintaining a horse and the experience gained has been very satisfactory.

In the cases where from 10 to 13 farms own a tractor jointly the machinery is used only to perform the rough work on the holdings. A permanent tractor driver is employed and paid for each effective tractor hour. The members pay Kroner 10.00 per hour irrespective of the kind of work, and Kroner 15.00 per hour for work with tractor and binder. The profit or loss is settled among the members on the basis of the registered acre of land of each member.

The machinery stations are of great importance at the present time when wages and machinery expenses are very high. Furthermore the common use of modern tractors with accessories on small farms has resulted in their owners realizing that modern material may be used with advantage on holdings of modest size. An increasing need for modern machinery on this type of property is being felt.

There are now types of tractors with accessories and machines which are suited to small holdings, but the capital required for introducing this machinery is at present too large. From a working point of view it pays to use modern material, but the large capital investment required will retard development in this field.

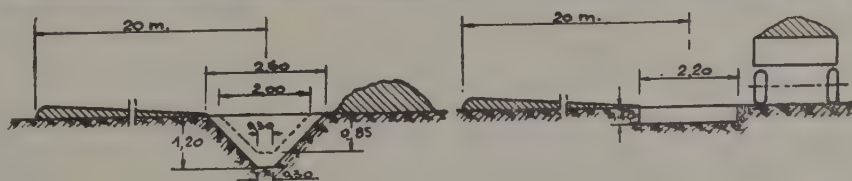
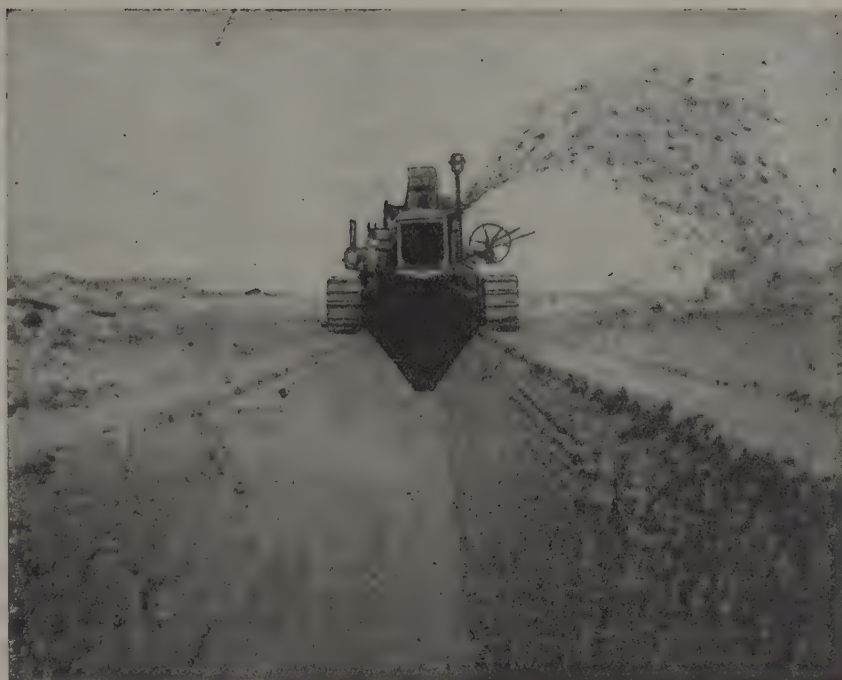
This is the background and importance of machinery stations in Danish agriculture.

A new ditch digger

This Italian machine for ditch and canal trenching has some new features which enable a considerable saving in power to be made. The machine consists of five main parts: a crawler propelling part driven by a Diesel engine geared to eight

speeds for adjustment to working conditions; two helicoidal conical grubbers with cutting teeth which excavate the side of the ditch and deposit the earth in the centre of the ditch; a bucket elevator with grub teeth which strike into the earth to lift it up to the projecting device. The earth is then deposited on the edges of the ditch in regular heaps or else projected evenly further off, according as required. There is also a device for smoothing the sides and bottom of the ditch. The extractor device is lowered when operations begin and is easily regulated to maintain the correct level at the bottom of the ditch.

It is reported that this digger can excavate up to 80 cubic metres of soil per hour.



The harvester-thresher

An exhaustive study of the harvester-thresher and the effects of its development has been made by Mr Lalloy, Chief Engineer of the French Agricultural Engineering Service, with the collaboration of Messrs Parguey, Dhucq, Lalanne, Nuret, Capelle and Codron*.

This machine was examined from the following aspects:

(1) Conditions governing its use; (2) different types and their performances; (3) transport, collection and storage of the grain; (4) economy obtained by its use; (5) effect of its utilization in regard to the social problem.

Today the harvester-thresher is becoming more and more the ideal machine in Europe not only for wheat but also for barley and oil crops (rape, mustard, etc), and oats, beans, peas, seed-beets etc. Its use is justified in harvesting crops for seed under contract. The crop should be planted in rows 16 cm. apart and the interspaces kept

clean and free from weeds. The problem of loss in straw, collecting and trussing or baling it, has often been raised, but the writer of this report concludes that it no longer appears to exist, except for a slight loss due to the fact that the straw is cut a few centimetres higher from the ground.

There are two techniques for collecting the grain – bagging or the grain tank – and it is noted that ‘practically all users agree that, in general, the grain tank is to be preferred despite the necessity of frequent stopping to empty the tank due to the density of the crop. The saving in manpower and also bagging is considerable’. In this case, special vehicles are needed for the transport of the grain in bulk and accommodation at the farm or silo.

A full utilization and good performance of the harvester-thresher depend on certain essential factors: healthy crops, not lodged, with not too much straw; a certain uniformity in the varieties chosen for their resistance to adverse weather conditions; rotation spacing out the harvesting over as long a period as possible.

Unfortunately, the limited space does not permit reprinting the very interesting mechanical descrip-

* *Bulletin technique d'information des Ingénieurs des Services agricoles*. Ministry of Agriculture, Paris, 1948, No. 32.

tion given by Mr Dhucq, agricultural engineer, formerly attached to the technical Centre of agricultural machinery. Details are given on the different parts for harvesting, lifting to the thresher, the thresher, separator, cleaning, straw, power required, weight and clearance. Attention is called to the point which the writer of the report considers could serve as a guide to manufacturers. When the holding is small, 3 hectares or less, and the topography of the district impedes easy lines of communication, the harvester-thresher must necessarily be easy to manage and handle. The writer states that the general use of the self-propelled 'all crop' type of machine with a 1.5 m. cutting bar, on smallholdings would meet with approval. Its work output is high since 4 to 4.5 ha. of grain can be harvested in a day.

The following conclusions of the writer are given in full.

'Comparison of the different points of view and our own studies leads us to conclude that the cheapest means of transporting the grain harvested is not necessarily transport in bulk. This system, for the average farm and not the extensive cereal-growing enterprises, entails specially equipped vehicles and the tying up of capital which heavily encumbers the transport operation. When the grain is taken direct to the silo, however, this system might be economical and convenient, if general use is made of properly designed containers, belonging to the cooperative and rented or loaned to the farmers. When harvesting operations are over these containers could be utilized for the transport of material in powder form (fertilizers, cement, etc.).

'The major problem is that of storage. The grain could be stored at the farm with a fair degree of security by means of simple equipment and precautions. Drying would only be necessary when the grain is excessively moist, and this operation would then be carried out by the cooperative silo or the inter-cooperative station.

'On the other hand, it would appear that the large cereal-growing enterprises tend readily to stock the grain on the farm, despite the high cost of even simple storage units.

'The average farmer, who is not anxious to make heavy investments, would prefer to get rid of his grain rapidly by delivering it to the silo. Some decisions would appear to be necessary as regards system of stocking, according to the trend followed, in order to facilitate and expedite the regulation of methods of stocking and storing wheat, on both an individual and collective scale.

'Another effect of the use of harvester-threshers on large cereal farms is now beginning to be felt, namely, the inadequate capacity of some silos, which would necessitate either increasing

the capacity or accelerating the rate of disposal during the harvest season.

'Collecting the straw, even with the pick-up baler, is still a heavy expense item. If prices drop appreciably, there would possibly be a tendency to leave the greater part of the straw on the field. Apart from its use in manure, straw is an important raw material for the country. Under these circumstances, it would undoubtedly be expedient to control prices and to ensure a margin of profit which would make it worth while to collect the straw.

'Correlatively with the development of the harvester-thresher, there will be a reduction in the number of threshing enterprises and teams composed of second-rate workers, less expense for the farmer and a saving in power'.

Higher production of tractors in Hungary

Hungarian production of tractors began in September 1945 in the Hofherr works. In the beginning the work was not well organized, and the most various types of machines were produced. At the end of 1945, 8.5 tractors were produced on the average per month. In 1946 this number increased to 14 and in 1947 to 33.5 tractors. The year 1948 showed a great leap forward: the works stopped making other machines and changed over to the production of tractors only. As a result of planned production the average monthly production rose to 75 tractors. The best result was achieved in December when a total of 150 tractors was produced. Now 6.5 tractors are produced daily and the production plan for the whole month calls for 160 tractors. According to the plan the highest output will be reached in September with a production of 10 tractors daily. In future the factory will only produce two types which have proved to be the best, and these will be produced by conveyor belt methods.

(IAI Bulletin, Vol. II, No. 2)

Production of new types of agricultural machinery in Czechoslovakia

Tractors will be manufactured in three types of various sizes: the 45 to 60 h.p. tractor for heavy field work; the 25 to 35 h.p. for lighter field work, and for market gardening, hop cultivation, etc., a light 15 h.p. tractor.

Czechoslovak designers are at work on construction of a tractor for exclusive use in agriculture, suitable for all types of field operations, and which would, in contrast to the present method of drawing,

carry the implements. These would be lifted by means of a hydraulic control.

In addition to the drill for segmented beet seed, and the semi-automatic potato planter, Czechoslovak industry will supply improved harvesting machinery: binders, to be manufactured in three sizes, a particularly light horse-drawn type and two tractor-drawn types; a universal forage crop harvester which will replace the tedder and rake, and may also serve to gather the crop into heaps. (IAI Bulletin, Vol. II, No. 2)

□

The Czechoslovak Government approved in January 1949 a bill providing for mechanization of agriculture. The bill empowers the Minister of Agriculture to control mechanization through the intermediary of the 'Agricultural Mechanization Centre, National Enterprise'. The new corporation will take over all agricultural machinery stations belonging to the State Land Estates. The mechanization centre will grant help by lending machines to small and middle-size farmers, will carry out repairs and train personnel for the maintenance and running of the machines.



The Polish sugar industry

The sugar industry started to develop in Poland during the second half of the 19th century when the first large sugar mills were built.

The average pre-war production before 1939 reached 500,000 tons; the largest production, of 824,000 tons, being reached during the manufacturing season of 1929/30. Poland's sugar production then held fifth place in Europe and its share in the world production of beet sugar was 6 %. Poland exported sugar, one of its chief export items, in average yearly quantities of 75,000 tons, to ten European countries.

The sugar production shared the damage suffered by the whole of Polish industry during the last war. Nevertheless in 1945/46, 52 sugar mills were already working and together produced about 170,000 tons. During the following manufactur-

ing season, the number of working mills increased to 71, and production reached 385,000 tons, making it possible to increase the home consumption to the pre-war level, i.e., 12 kg. per head.

The increase in production to 510,000 tons during the last manufacturing season, i.e., 1947/48, shows the pace of post-war development of Polish sugar production. Home consumption was raised to 14 kg. per head, leaving a surplus of 150,000 tons, i.e., 100 % more than the pre-war average, for export.

To-day 75 sugar mills are working, producing three kinds of sugar for export: so-called ordinary white granulated sugar; fine, medium and coarse. The sugar industry is now centralized in one state enterprise. Production is managed by the Central Board of the sugar industry while the commercial side of this branch is in the hands of the Commercial Selling Board which also has charge of the sugar distribution and its export.

The results achieved in the reconstruction of agricultural production, like the results in the sugar industry, which is connected with agricultural production, are the basic conditions for the increase of sugar production and thereby also of its export. The importance of the sugar industry in Polish economy is shown by the proportion of sugar in Polish exports of agricultural foods. This proportion amounts to-day to 23 % and before the war only to 3.5 %.

By 20 December 1948 a total of 611,040 tons of sugar had been produced, namely, 91,040 tons more than the quantity contemplated in the production program. (I.A.I. Bulletin).

Meeting on food preservation

(We continue the series of brief summaries of specialized lectures given at the Meeting on Food Preservation which took place in Denmark between 11 and 23 October 1948).

In his communication to the meeting on food preservation Prof. Jepson gave a description of the *part micro-organisms play in the infestation and deterioration of food* and indicated how they are influenced by cooling and freezing temperatures. He stressed the need for using only fresh products in perfectly sound condition, for the careful inspection of the storage and processing plants and designing plants so as to promote their sanitary efficiency. He then discussed the various sources of contamination and the need for extreme cleanliness and the value of the different detergents.

Mr Clausen dealt with the fundamental principles of the *construction of cold storage plants*, while Elfving entered into the consideration of specific details of such construction. The recent trends

in the construction of such installations were discussed; details were also given on the technical requirements of refrigeration and insulation, on materials used in insulation and their quality and special characteristics, vapor barriers, ground foundations, etc. Elfving entered into the detailed discussion of (1) circulation of moisture from the goods stored to refrigerator coils, and (2) movement of air around wet objects in the storage-room at equilibrium, with a view to drawing conclusions that would facilitate the choice of the suitable type of coiling and equipment for cold storage rooms.

Mr Nielsen discussed the *cooling of milk* at the place of production as well as the *cooling of cream* for the making of butter. He discussed in some detail the result of Danish and other experimentation in the storage of butter as well as the *storage of cheese*. He also described the cooling problems arising in connection with long distance exports of Danish milk and methods by which these problems were solved.

Mr Jorgensen explained the way in which the establishment of cooperative slaughterhouses for poultry in Denmark contributed to the development of Danish exports of poultry by levelling of the *seasonal variations in market supplies by the freezing and cold storage of poultry*. He also dealt with the chilling, freezing and storage of ducks, geese, turkeys and hens.

Mr Borgstrom gave an account of the research program developed by the Swedish Agricultural Research Council in connection with the *cold storage of fruits and vegetables* since the war. A distinction was made between two different classes of fruits and vegetables, namely: (1) potatoes and root crops and (2) berries and green vegetables. He laid stress upon the losses incurred in the course of the storage and the distribution of these products and dealt with the methods of reducing such losses. On the same subject, Mr W.H. Smith, expert of the Department of Scientific and Industrial Research in fruit and vegetable storage mentioned that *Refrigerated gas storage* has assumed peculiar significance in England because in that country apples are injured by temperatures below $3.5^{\circ} - 4^{\circ}$ C. if they are exposed to them for any length of time. If they are to be stored for long, some way other than storage at 0° C. as practised in U.S.A. and Canada has to be used to arrest deterioration. Gas storage achieves this. In gas storage the fruit provides its own modified atmosphere. It removes oxygen and replaces it by carbon dioxide. The right concentration of carbon dioxide and oxygen are maintained by adjusting ventilation. Refrigeration is necessary to keep the temperature at the correct level.

Different varieties of apple and pear require different conditions of temperature and carbon dioxide and oxygen concentration. Varieties which require a low concentration of oxygen with moderate or low concentration of carbon dioxide must be kept in a store filled with a device for removing the carbon dioxide from part of the atmosphere. Close attention is paid to picking at the right stage of maturity for gas storage. Premature gathering may cause scald and poor quality. If the fruit is over-mature gas storage is of no value. Similarly there must be little delay between picking and storing. Different varieties should not be stored in the same chamber. Scald is often a serious trouble with gas-stored apples of some varieties and is largely prevented by avoiding premature gathering and wrapping in paper containing mineral oil. Gas-stored apples and pears not only keep longer than in refrigerated storage but remain in marketable condition longer after removal from store.

Mr Brewster discussed the problems of *handling chilled and frozen meat* in bulk in connection with its transportation over long distances, especially by sea. He dealt with the method used and the different types of losses suffered. He illustrated a method evolved for large-scale freezing of meat by drawing the meat into cone-shaped moulds by means of a vacuum, a method which ensures the greatest economy of space. This method is used also in the Antarctic for the freezing of whale meat.

Mr Notevarp discussed the changes taking place in the quality of freshly caught fish. He explained the meaning of the extent of such changes, their rate, etc. He discussed the *methods of preparation of fish and of its chilling*, freezing and storage as well as the influence upon fish products by prolonged storage.

Mr Mansted discussed the development of the modern *household refrigerator* and of the *home food freezer*. He dealt with the development of locker plants in Denmark and with the use of substitute materials in their construction such as wood slats in place of steel plates. He explained the various services supplied at locker plants as well as the methods used in cooling and freezing of products.

Mr Kondrup, Chemical Engineer, dealt with the *testing of food by the human senses*, the methods in which testing panels are set up, and advantages and disadvantages of the method of testing by human testers. He made a comparison between difference testing and quality testing.

Discussing food preservation by cold, he stressed the point that satisfactory packaging is a question of the greatest importance. To-day a series of rel-

atively satisfactory forms of packaging is available. However, improvement is necessary on many points. There are not so very many new developments within the field of packaging, but there is every likelihood of witnessing an interesting development where the experience gained during the World War II with regard to thermoplastic materials will be useful. When improved and new forms of packaging are to be designed it is of the greatest importance to realise the goals which should be aspired at.

Mr Jangaard discussed the situation and problems with regard to the *marketing of frozen foods* in Europe as compared with that existing in the United States where there exists a highly developed system of chain stores. He dealt with the technique of marketing, dividing the marketing operations in two separate groups: (1) production, quality, packing and storage; (2) transport, trade and exchange and distribution and (3) prices and payments. He insisted upon the importance of developing cooperation among the producers, processors, transport organizations, wholesalers and retailers as well as among the various countries with a view to promoting the trade in chilled and frozen food products, pointing to the advantages of increasing the turnover of such trade.

Mr Sjetne dealt mainly with the development of a combined method for the pre-treatment and the *freezing of vegetables and fruits*, consisting of the several operations such as washing, blanching removing excess water and freezing without touching the products with the hands. The operations consist of a drum process in which heat, vacuum and cold treatment can be applied in succession.

Substituting for Mr Bamberger, chairman of the Interprofessional Quick-Freezing Association, Mr P. Clement, Technical Director of the 'Entrepôts et Gares frigorifiques' of Paris discussed the *Freezing Technique*, for which an Interprofessional Quick-Freezing Association has been created in France. He recalled the rule established by Dr Plank of Karlsruhe to define freezing rapidity. According to Plank a product must be frozen at a rapidity of 5 cm. an hour in order to be qualified as 'Quickly frozen'. He points out that the first condition to be observed in the *Preparation of products before freezing* is the appropriate choice of the varieties and the exact appreciation of the degree of maturity. After the preliminary operations of grading, sorting, podding and washing, vegetables are blanched in order to destroy the oxidizing diastases. Concerning *packing of frozen products*, he states that packing done before freezing retards freezing. Three types of freezing procedures are employed, i.e. *contact, ventilation and immersion*. The different stages of *distribution of*

frozen products were described and the need for a continuous low temperature freezer chain was pointed out. The production of frozen products is restricted on purpose as the equipment of shops for sale is still limited, but this production can develop rapidly as it has considerable means for manufacturing and high quality produce at its disposal.

Mr Donald K. Tressler, Ph.D., Food Consultant, U.S.A., discussing the *Theory for preservation by cold* points out that the principal causes for food spoilage are (1) The growth of micro-organisms, (2) Life processes of fruits and vegetables, (3) Enzyme actions in damaged tissues, (4) Physical changes such as desiccation, and (5) Chemical changes such as oxidation of fats and denaturation of proteins. Cool storage materially reduces the rate at which foods deteriorate from all four causes. Storage at temperatures below freezing is even more effective in reducing deterioration. However, freezing causes marked changes in many foods and is the accidental cause of spoilage of some fresh foods, such as fruits and vegetables. If foods are refrigerated at the temperature below -10° C., spoilage by micro-organisms is entirely prevented, since the growth of yeasts and molds does not occur, and bacteria multiply so slowly that foods are not affected. Much lower temperatures are required to prevent deterioration by desiccation or by enzymic and chemical actions.

Both fruits and vegetables are composed of living matter and consequently respire and transpire. That is to say they continue to take up oxygen and give off carbon dioxide and water. This action causes a decrease in the sugar content which is especially noticeable in peas and lima beans. Bruising and freezing both cause mixing of the cell contents and an abnormal respiration which may in turn cause the development of off-flavors. Commercially, vegetables are blanched preparatory to freezing. Fruit, however, is not commonly treated prior to freezing, and consequently, enzyme actions give trouble during freezing and subsequent cold storage and thawing. The physico-chemical or colloidal changes are probably equal in importance to the chemical changes. It has been found that in fish and meats, the rate of freezing should be relatively rapid. If such a 'quick frozen' product is thawed immediately the moisture is reabsorbed by the tissues.

If, on the other hand, the freezing is very slow the product does not entirely return to its original gel condition. Some of the liquid resulting from the thawing of the crystals leaks out as 'drip' or 'leakage'. With only a few exceptions, notably certain tropical fruits, most foods are preserved best in cool storage at temperatures of 0° C. or very slightly below. Similarly, almost all frozen

foods retain quality best if held at the lowest available temperatures.

Mr Gustav Lorentzen, Civil Engineer, stated that *refrigerating machinery* includes a good deal of equipment in addition to the compressors. This equipment is in most cases responsible for the greater part of the first cost. The design and efficiency also have considerable influence on the capacity and running costs of the whole plant. While the different general types of condensers and evaporators used are very well described in the available literature, reliable information regarding the coefficient of heat transfer obtained under varying conditions is rather scarce for many types. There is also a good deal of incongruity in the figures given in the different sources. Flooded type evaporations for self-circulation or pump-circulation are now more and more replacing the *dry expansion coils for larger ammonia equipment*. There is a trend towards low pressure liquid pump circulation for some applications, in order to facilitate the problems.

Mr O. Kramhøft, Managing Director of A/S Thomas Ths. Sabroe & Co., Århus, Denmark, in his paper on the same subject, after a short historical introduction gave a description of modern designs of ammonia and freon compressors mainly comprising the types of machines made by European makers, but also comprising a few types of American designs. Further various types of capacity regulation were mentioned.

Lubrication problems and proper arrangement of lubricating pumps were described.

The European Brewing Convention which was instituted to promote scientific cooperation in the Malting and Brewing industries held its second Congress at Lucerne from 29 May to 3 June, 1949. There were four scientific sessions at which the principal papers and discussions were concerned with (1) proteins in brewing; (2) the production by means other than pasteurization of sterile beer for sale.

Finland is building a factory for production of sugar from wood, the first factory of its kind in the world. Experimental production of sugar has been going on since 1942, with such favourable results that the factory plans production on a scale of 500 kg. per day. Neither price nor quality of sugar produced from wood differs from that of ordinary sugar.



Action of phytohormones on the vine

In the Bulletin of the International Wine Office * Messrs P. Françot and J. Mauro give the results of observations and experiments carried out in 1947 and 1948 on the reaction of the vine to hormones. Their conclusions may interest our readers.

Different varieties of *Vitis vinifera* were observed for their reaction to two heteroauxins: 2-4-dichlorophenoxyacetic acid in salt form, ethyl 2-4-dichlorophenoxyacetate and 2-methyl-4-chlorophenoxyacetic acid as a sodium salt, entailing:

- the formation of roots on the internodes;
- growth inhibition;
- deformation of the leaves and branches;
- failure of part of the crop.

When the dose employed does not kill the plant, the action is transient and the following year growth returns to normal.

The corky layer between scion and stock appeared to check the normal basal-apical diffusion of the heteroauxin.

From the practical standpoint, wine-growers should resolutely reject all commercial weedicides containing hormones, in the interest of their vineyards and crop.

Owing to the accidents caused in some irremediable cases, the attention of viticulturists and agriculturists should be called to the danger, for winegrowing, of using these new heteroauxin weedicides.

Even more so than for synthetic insecticides (DDT, HCH, SPC, etc.) and because of the grave risk to the future of the vineyard, very strict regulations are necessary for the manufacture, storage, sale and utilization of heteroauxin-containing products in agriculture.

There is evidence of the necessity of prohibiting, on the one hand, the use of hormonized powders for dusting and, on the other, the use of hormonized dusts, in wine regions, near the wine-growing zone (the extent of the zone to be determined by the competent services after thorough investigation).

* Bulletin de l'Office international du Vin, Paris, 1948, N° 214.

To improve the yield of vineyards in France

The wine-growers in the south of France, anxious to restore their vineyards, in 1947 set up a co-operative Institute for the selection of vine stocks and viticultural genetics. Juridically this Institute is made up of cooperatives and directed by experts in this sector, with the technical assistance of the National School of Agriculture in Montpellier.

This Institute is mainly engaged in the selection of vine stocks and plants in order to supply wine-growers only with healthy material conforming in every way to the specifications laid down by the present regulations to improve the yield of vineyards. The Institute is also endeavouring to create new varieties which will be tried out for several years so that only the best will be utilized. Experiments are being carried out in the field of pure and applied viticultural research. The difficult problem of determining the rootstock to be used has been solved by the analysis of total and active limestone. The Institute intends to plant new vine stocks to replace vineyards which are too old, mixed or suffering from infectious degeneration; improve the existing mother vines whenever mass selection is possible and profitable; select healthy scions; breed and distribute varieties obtained either at the Institute or by stations attached to the National Institute of Agricultural Research; undertake agricultural experimentation in collaboration with the laboratories attached to the Ministry of Agriculture, and the calcimetric analysis of soils in order to ascertain the most suitable stock for a specific soil.



A new potato disease

'La pomme de Terre française', technical journal for tested seed potato production, published the following note in the January 1949 number:

A Netherlands correspondent reports the appearance in the Netherlands of a new potato disease which is called 'Aardappelmoetheid', meaning 'potato fatigue'.

In certain regions of the Netherlands the Phytopathological Service discovered that some potato crops were attacked by a peculiar disease which caused the plants to wither. In seeking the cause of this disorder, the roots were found to be invaded by a variety of the nematode *Heterodera rostochiensis*. The characteristic of this nematode is that the female does not deposit the eggs; when these are mature the female dies leaving the eggs encased in the residue of its body attached to the roots, thus forming on the roots small brown granules similar to grains of sand. This mass of eggs is called 'cyst'; it remains in the soil and when the new crop is planted, the larvae head for the roots and the cycle recommences.

As a protective measure, it is prohibited for the moment to grow potatoes in infested areas until an effective means of control can be found.

A disease of maize

There is now a widespread occurrence of Stewart's disease of sweet corn — *Bacterium stewartii* (E.F.S.) Stev. (*Aplanobacter stewartii*) — in Italy, ranging over the entire region from Piedmont to Venetia, including the Po Plain and the Friuli region.

This disease, already known in America in the last century, appeared for the first time in Monza in 1935. Unnoticed during the war, it re-appeared to a serious extent in the Friuli region in 1946.

The disease is disclosed first by translucid streaks along the leaf ribs. The disease is particularly serious as it often starts in the seedling stage. In advanced cases the leaves shrivel and the stems only remain green for a short time. The ears are stunted. In severely attacked fields losses may be as high as 65 per cent. The bacterium, lodged in the vessels, attacks all parts of the plant. Infection can be carried over from one year to another by seed, although no signs of the disease are evident. The disease can be transmitted to one plant from another by insects or rodents, not as yet identified. Lastly, it can also be transmitted by various wild grasses.

Since this disease develops inside the plant, an effective means of control has not yet been found, and research should be directed towards obtaining a maize variety which is resistant to this bacterial organism.

Rodent destruction and DDT

Experiments were carried out to ascertain the degree of toxicity of DDT in regard to rodents, rats, mice and field-mice. The experimenters, Messrs Edmond and Etienne Sergent of the Pasteur Institute of Algeria, sent a report on

their findings to the Academy of Agriculture of France *. Account was taken of the possible danger of the use of DDT in rodent control to human beings and domestic animals, particularly cats.

The results of experiments effected under as natural conditions as possible led to the following conclusions :

A powder with a low DDT content (3 to 10 per cent. active substance) poisoned 90 per cent. of the mice exposed to contact and nearly all the mice which touched the powder died (98.6 per cent., or 88 per cent. of the total).

A strong DDT powder (50 per cent. active substance) poisoned and killed the mice exposed.

No difference was noted in susceptibility to DDT as regards age, sex, colour of coat, whether white or grey.

The faint odour which evolves from DDT powder did not exert any repellent action on mice : chance contact with the powder did not cause them to turn away.

The control mice, kept under the same living conditions and on the same premises, remained healthy.

With the rats, the weak DDT powder poisoned 60 per cent. of sewer-rats and of these half died, namely, about a third of the total. The strong DDT powder (50 per cent.) poisoned nearly all the rats (96 out of 100), 83 per cent. of these dying. As in the case of mice, there was no difference because of sex or age, and the control rats kept perfectly healthy.

A 5 per cent. powder did not appear to poison field-mice, but the strong powder gave 100 per cent. mortality results. As in the case of mice and rats, field-mice did not show any aversion for DDT. The best way of poisoning them consists in placing the powder in the opening of their burrows. Some field-mice showed an innate resistance to DDT, but generally after several treatments they finally died. In two cases out of a hundred, however, sewer-rats withstood 24 and 26 treatments, and it was supposed that the first contact with the poison had made them immune.

The 50 per cent. DDT powder may be dangerous for cats which eat the poisoned mice, but since the low strength powder is sufficient it should be chosen in controlling these small rodents. The 50 per cent. powder which is needed against sewer-rats and field-mice should never be adopted in premises inhabited by man or frequented by domestic animals. Advantage should be taken of the fondness of rats for drains and pipes. In handling DDT powder the experimenters recommend taking every precaution to prevent the DDT powder diffusing in the air ; after handling, the hands must be carefully washed.

* *Comptes rendus hebdomadaires des Séances de l'Académie d'Agriculture de France*, 1948, No. 17, 8, 15, 22.

A five-year Polish-Czechoslovak agreement on the control of agricultural plants against pests and diseases has been signed at the Ministry of Foreign Affairs in Prague.

ECONOMICS AND MARKETS



Agricultural Economics Research Institute in the Netherlands

Object, nature of its activities, and organization,
by Professor J. Horring

GENERAL

The Agricultural Economics Research Institute (L. E. I.) was founded on 1 December 1940 by one of the farmers' organizations.

Since 1945 it has been an institution in which on the one hand the Ministry of Agriculture, Fisheries and Food and on the other hand the Agricultural Foundation (in which also the organizations of Agricultural Workers are represented) are equally concerned. From this time the research work has covered the whole field of the said Ministry, including also from early in 1946 Fisheries.

The financing is done by the two above-mentioned parties on an equal footing. The two parties nominate an equal number of members for the Board. So the AERI is a semi-official body with sufficient guarantees for independency and the required objectivity in the execution of its task.

OBJECT

In its regulations the object of the Institute has been given a wide scope. In short it may be defined as the promoting of the knowledge of farm economics and of general economic phenomena and problems bearing on and of vital interest to Netherlands Agriculture.

NATURE OF ITS ACTIVITIES

With this end in view data are collected, worked up and disseminated. As far as possible the collection of these data is left to such institutions as naturally already possess them or are in a position to collect them on request.

A close contact is maintained with these institutions. Great emphasis is placed on the scientific study of the problems both quantitatively and qualitatively.

But for all that, a great part of the staff is charged with the task of collecting and statistically working out the data obtained from the cost accounts of enterprises in the field of Agriculture, Horticulture and Fisheries. These data cannot be obtained from other sources and consequently have to be collected by the AERI itself.

The reports and memoranda on the researches are sent in to the relative commissions and sections of the two parties mentioned above.

They are useful for the determination of the policy of the Government who for this purpose consults with the Agricultural Foundation or with the relative organizations in the field of horticulture and fisheries. The nature of the activities will be described below when the various sections are dealt with.

ORGANIZATION

I. *General economic research.*

This research work comprises the general-economic problems of Netherlands agriculture. It applies to problems arising in the field of national and international production, consumption and marketing in their natural relation and with reference to the international economic problems in general.

The field covered by these problems is so extensive that only subjects of the greatest current interest can be selected for treatment.

II. *Research on economic-sociographic problems.*

The aim of this research is to detect the causes through which the agricultural function of a given area has not come to adequate economic development. The research work aims at tracing all regional factors which are of value for the prosperity of the area concerned.

This research work provides a basis for the determination of subsequent policy.

III. *Research on farm economics.*

A. *Agriculture*

This section comprises 4 sub-sections.

1. *Bookkeeping.*

This sub-section is charged with the annual cost accounts of some hundreds of farms. For the fi-

nancial year 1948/1949 they were divided as follows :

1. arable farms on clay-soil and excavated peat moor and mixed holdings on clay-soil (cost price per product)	150
2. mixed holdings on sandy soils . .	400
3. pasture farms (cost price of milk) .	285
4. poultry farms (cost price of eggs)	185
5. other farms (including sheep farms)	15

Total . . . 1,035

For pasture, arable and poultry farms, cost price bookkeepings proper are kept.

For nearly all mixed farms a bookkeeping of the trade and economy of the farms as a whole is kept. The great practical objections attaching to costing of the products of mixed farms have necessitated a simpler mode of bookkeeping. On some farms where these objections do not weigh so heavily, an attempt is still made to keep separate accounts for the costs of various products. Of all farms records of both the proceeds and the yield are required.

In addition to the specified cost and proceeds, the technical farm data required for the research work are obtained from this source. In view of this work a close cooperation with the Government Agricultural Advisers is maintained. At the office of each of the Advisers concerned one or more officials are employed in carrying on these bookkeepings. One or more assistants of the Government Agricultural Adviser have also been assigned to this work. Data on poultry farms are furnished by the Government Poultry Advisers. The Bookkeeping Sub-Section maintains a record of the trading results of each of the farms. These figures supplemented with the average figures per district (or part of a district) serve as a basis for the work of the Calculation and Farm Cost Study Section.

2. *Calculation.*

In this sub-section the above-mentioned regional figures of cost price and remunerativeness per district are calculated for a future production period (so-called forecasting). These calculations provide data for the determination or judging of prices.

3. *Farm cost studies.*

This sub-section is concerned mainly with the compilation (arranging and grouping) of the results obtained in the field of bookkeeping with a view to understanding the possibilities of the most rational mode of farm management and the means to reach it. For this purpose it is attempted to determine the relationship between the remunerativeness or data on the proceeds on the one hand, and definite farm management factors on the other. These surveys are handed to the Agricultural In-

formation Service which, on analysis of these figures, provides the farms with the required information.

Farm cost study is based on the results of two sorts of bookkeepings:

(a) *Cost accounts.*

These bookkeepings are carried on by the above-mentioned Bookkeeping Sub-Section. In the past years owing to various circumstances only small attention has been paid to the comparison of the results of the various holdings on the basis of these figures.

By the end of 1948 this work was vigorously taken in hand.

(b) *Fiscal bookkeepings.*

These figures originate from bookkeepings which have been maintained by the agricultural bookkeeping offices of the agricultural organizations with a view to the tax-returns.

The results of an appreciable part of these bookkeepings are stated by these offices on a special form, which is sent to the AERI for further elaboration.

These bookkeepings do not provide data on the yield (only on the proceeds) and fewer agricultural-technical data than the above-mentioned bookkeepings. The number of holdings included in this way (some thousands per financial year) is much greater than that in the first named category.

This line of research is still in its initial stage so that as yet it is impossible to ascertain if the number of data supplied by the various farms will be sufficient.

4. *The statistics of the results of the farm as a whole.*

These statistics are compiled from the above-mentioned fiscal bookkeepings which have been sent in by approximately 20 agricultural bookkeeping offices.

In these statistics the trading results of some thousands of holdings are arranged according to agricultural district, size and type of holding. In the period 1923/46 these statistics were compiled by the Ministry of Agriculture, Fisheries and Food. From the financial year 1946/47 this work has been done by the AERI.

B. *Horticulture*

The organization of the economic research work on horticultural enterprises is similar to that in the agricultural field.

The documentation for this work is being extended towards its required size.

In principle 4 sub-sections may be distinguished.

1. *Bookkeeping.*

This work was set on foot in 1948. As early as before the war and in the first years of the war a number of cost price bookkeepings were worked

out by the Horticultural Division of the Ministry of Agriculture, Fisheries and Food.

2. *Calculation.*

So far the accounts have not been based on figures obtained from cost price bookkeepings. As already stated, the collection of these figures on a somewhat extensive scale was not started before 1948.

The required data on the various elements of cost and the proceeds are obtained from the information supplied by some dozens of holdings.

3. *Cost studies.*

Owing to the scarcity of data no special attention has so far been paid to this class of work. Yet the present accounts which are, in a way, similar to standard calculations already afford a possibility of obtaining economic information through the Horticultural Information Service.

4. *The statistics of the results of horticultural holdings as a whole.*

The first task of this sub-section was the elaboration of the results for 1946. The compilation of these statistics was much retarded through the great arrears of work at the bookkeeping and administration offices.

IV. *Economic and social research in the field of fisheries.*

A. *General - economic and social research*

On the one hand this research work aims at studying the general-economic and social aspects of Netherlands fisheries (including market-analysis, foreign orientation etc.) and on the other, at tracing the causes through which certain fisheries are in unfavourable condition with a view to planning measures for improvement.

B. *Cost studies*

This research work is based on the data of a limited number of bookkeepings which are conducted by the AERI.

It comprises the carrying out of calculations on remunerativeness and the study of the possibilities of improving management of fisheries.

V. *Statistics.*

The primary statistics are generally obtained from other sources. These figures are then worked out in such a way that the course of prices is ascertained both of the elements of cost and of the finished product. Further a documentation is kept of the quantities produced and consumed, imports and exports etc. In addition a documentation of literature is maintained.

VI. *Internal affairs.*

This sub-section deals with all affairs concerning the personal staff, the internal administration, the typing and stencilling and any further internal affairs.

International Wheat Agreement

The International Wheat Conference which met in Washington on 25 January 1949 adopted at the closing session on 23 March the International Wheat Agreement and set up a preparatory committee of ten nations to put it into operation.

The agreement obligates five exporting countries to sell and 37 importing countries to buy 456,283,389 bushels (160,794,266 hectoliters) of wheat annually for a four-year period, at a maximum price of 1.80 dollars a bushel (1 bushel = 0.27216 quintal) and a minimum price of 1.50 dollars, scaling down 10 cents annually to 1.20 dollars in the fourth year. The five exporting countries are Canada (203,069,635 bushels), United States (168,069,635 bushels), Australia (80 million bushels), France (3,306,934 bushels = 90,000 metric tons) and Uruguay (1,837,185 bushels). Following are the 37 importing nations that guaranteed the purchases: Austria, Belgium, Bolivia, Brazil, Ceylon, China, Colombia, Cuba, Denmark, Dominican Republic, Ecuador, Egypt, El Salvador, Greece, Guatemala, India, Ireland, Israel, Italy, Lebanon, Liberia, Mexico, Netherlands, New Zealand, Nicaragua, Norway, Panama, Paraguay, Peru, Philippines, Portugal, Saudi Arabia, Sweden, Switzerland, Union of South Africa, United Kingdom and Venezuela. Other countries which were represented at the conference either as observers or as full participants do not sit in a guaranteed figure; they are Afghanistan, Argentina, Chile, Costa Rica, Czechoslovakia, Ethiopia, Finland, Iran, Luxembourg, Pakistan, Poland, Syria, Turkey, U.S.S.R. and Yugoslavia.

France is the only European nation entering the agreement as a supplier.

We give below the European consumer countries and their quotas per annum:

	Bushels	Metric tons
Austria	11,023,113 =	300,000
Belgium	20,209,040 =	550,000
Denmark	1,616,723 =	44,000
Greece	15,726,308 =	428,000
Ireland	10,104,520 =	275,000
Italy	40,418,081 =	1,100,000
Netherlands	25,720,597 =	700,000
Norway	7,716,179 =	210,000
Portugal	4,409,245 =	120,000
Sweden	2,755,778 =	75,000
Switzerland	6,430,149 =	175,000
United Kingdom	177,067,938 =	4,819,000

Transactions outside the agreed range of prices fixed for each of the four years will be entirely free but they will not count towards fulfilment of the obligations assumed by signatory countries. It is provided that if the exporting and importing country agree, a transaction or a part of it, for the purchase and sale of wheat entered into before the entry into force of the operating sections of the new agreement shall, irrespective of price, count toward the guaranteed quantities of those countries. Wheat flour can be substituted for wheat if agreed between buyer and seller.

If importing countries responsible for 80 per cent. of the total purchases, and exporting countries responsible for 8 per cent of total sales ratify the agreement by 1 July next, its administrative provisions go into effect not later than 1 September, 1949.

Work of the preparatory committee — the members of which are Australia, Canada, France, and U.S.A. as exporters and the Benelux countries, Brazil, Egypt, India, Italy and United Kingdom as importers — will then be taken over by the executive committee of the new International Wheat Council created in the agreement for the purpose of its administration.

FAO, International Trade Organization (ITO) and the Interim Co-ordinating Committee for Intergovernmental Commodity Agreements (ICCICA) as well as such other inter-governmental organizations as the Council may decide, are entitled to have one non-voting representative at meetings of the Council.

Cooperation to increase intra-European trade

The Committee on Development of Trade of the Economic Commission for Europe held its first meeting in the week ending on 19 February 1949 prior to the confirmation of its establishment by ECE.

Twenty-four European nations and the United States unanimously agreed on a programme of co-operation to expand European trade.

The countries stressed their desire to expand intra-European trade, particularly trade between Eastern and Western Europe.

They called upon the ECE Executive Secretary to carry out, in consultation with the governments concerned, the preliminary work necessary to establish (1) a list of commodities in short supply in Europe, and (2) the potentialities of an expansion of production and export of these commodities in Europe, as well as the need for the supply of equipment and other goods in order to achieve these increases in production and export.

The delegations also agreed to study jointly ways to improve current trade and payments mechanisms,

which in some cases are choking intra-European trade.

The Committee also called for Secretariat studies on expanding the exchange of patents and 'know-how' and of students and trainees. It will decide at a later meeting what action appears necessary on these problems.

Representatives from the following countries participated in the first session of the ECE Committee on the Development of Trade: Albania, Austria, Belgium, Bulgaria, Byelorussian S.S.R., Czechoslovakia, Denmark, Finland, France, Greece, Hungary, Italy, Luxembourg, Netherlands, Norway, Poland, Rumania, Sweden, Switzerland, Turkey, Ukrainian S.S.R., the U.S.S.R., United Kingdom, United States and Yugoslavia. The second session of the Committee for Development of Trade was scheduled to open on 23 May 1949.

International meetings on trade

A compelling need for an international approach towards problems of trade which can no longer be solved by nations individually, brought about the drafting by fifty-four nations at the end of 1947 of the Havana Charter. It will come into operation and the International Trade Organization will be created if 20 countries have accepted the Charter by October 1949. Meanwhile, the Interim Commission of the International Trade Organization (ICITO) as a temporary UN agency with specified functions has established provisional headquarters at Geneva.

Twenty-two of the twenty-three countries which participated in the 1947 Geneva Tariff negotiations accepted the tariff concessions embodied in the General Agreement on Tariffs and Trade (GATT). The magnitude of these concessions which comprised over 45,000 items entering into export or import, and the amount of trade covered — in the region of 10,000 million dollars — show clearly that the great trading nations are determined to succeed in their assault on at least one aspect of the problem of trade blockages. These countries — or Contracting Parties to GATT, as they are called — held two significant meetings in 1948 at which, a variety of trade problems were resolved. The third session of the Contracting Parties opened at Annecy, France on 8 April 1949. The Tariff Negotiations Committee under its Chairman, Walter Muller, Chile, received its first report on 28 April on the progress of the tariff negotiations.

Up to and including 26 April, 28 pairs of countries had met and exchanged offers. In 7 of these negotiations more than one meeting had been held. In addition, dates have been fixed for the opening of negotiations by 51 pairs of countries by 15 June.

French export program of milk products

The dairy products included in the Government program for 1952 and intended for export, comprise:

- (1) 21,000 tons cheese
- (2) 25,000 tons butter
- (3) 4 million hectolitres evaporated or powdered milk.

These figures referring to exports to foreign and overseas countries, are only estimates and depend on production and the requirements of national consumption.

A very considerable effort will be needed for France to carry out this program which represents a commercialization of 13 million hectolitres of milk, or 10 per cent. of the dairy resources. (Note of the *Service provisoire de l'Economie laitière*, S.P.E.L., Bulletin d'Information, Paris, No. 1, 1949).

Poland exports of agricultural products

The Polish potato industry re-opened its export activity in 1948. Its European and overseas customers are: Belgium, Czechoslovakia, France, Great Britain, India, Italy, Palestine, Sweden, Switzerland. Exports have reached the total volume of 5,500 tons, and the over-all productive capacity of the industry has trebled its pre-war size. The industry has at its disposal twenty-one large plants manufacturing, among other things, potato flour, white and yellow dextrin, potato syrup, potato cakes.

For oil production, Poland raises winter and spring rape seed, besides mustard and poppy seed. About 2,370 tons of rape seed was exported to Czechoslovakia in 1948. Poland has also exported 40 tons of poppy seed and 10 tons of mustard seed which were purchased by the United States. (IAI Bulletin, Vol. II, No. 2)



The food subsidies in the United Kingdom amounted to 484 million pounds in 1948/49; they absorb one-eighth of the total estimated ordinary revenue for the year.



The retail price index of food is lower in Belgium, Finland, France, Sweden, Switzerland, the United States, Canada, Hawaii, Puerto Rico, Panama, Mexico, British Honduras, India and Ceylon, according to the International Labour Office.

Trade Agreements

ALBANIA

Albania and Czechoslovakia have signed a one year's economic and payment agreement. Czechoslovakia is to supply machines, textiles and other industrial products in return for raw materials.

□

A trade agreement was signed in Warsaw between Albania and Poland at the end of January 1949, which foresees goods exchange to the value of some 2 million dollars both ways. Poland will supply railway material, ships, textiles, machinery tools, electrotechnical equipment; Albania will export copper, cotton, petrol, tobacco. In addition, the agreement provides for further credit deliveries from Poland to be covered later by exports of Albanian goods.

AUSTRIA

Austria and the Belgo-Luxembourg Union have agreed on new quota lists to be applied until 30 June 1949 in their commodity exchange. The value of Austrian exports (magnesite, lumber, cellulose, paper and paper pulp, textiles, steel products, machinery) will amount to 330 million Belgian francs, while the Belgo-Luxembourg Union will supply goods (fresh and tinned fish, chemicals, pharmaceutical products, leather, furs, footwear, fertilizers, machinery, metal products, glassware) to the value of 540 million francs.

□

A trade and payment agreement covering the period to 31 December 1949 has been concluded between Austria and Bulgaria. The goods exchange will be effected on a clearing basis, though compensation deals are also foreseen. Austria is to export mainly steel, steel products, railway material, textile machinery, mining equipment, instruments, agricultural machinery, tractors, agricultural produce, paper, chemicals, electrical equipment, and is to receive in return maize, wheat, rice, fruits, vegetables, grapes, fruit pulp, honey, oil, eggs, onions, tobacco, skins.

□

Austria and Italy signed a trade agreement in Rome on 18 March 1949 covering goods exchange to the total value of 40,000 million lire. Italy will export mainly rice, tools, silk, automobiles, fruit, vegetables, while Austria will supply magnesite, timber, cellulose, newsprint and steel.

□

Austria and the Netherlands have extended their trade agreement over another year. The commodity exchange is to be doubled and will attain for each signatory 32 million guilders. Austria is to supply lumber (60,000 cubic metres), timber constructions, paper, machinery; the Netherlands will export flax, kapok, rayon, cast iron, tin, rubber, chemical and machinery products.

□

Austria and Turkey signed a trade agreement on 1 March 1949 in Vienna. It provides for commodity exchange on the basis of clearing payment,

though the possibility of compensation is also foreseen. Neither quota lists nor trade volume lists have been fixed.

BELGO-LUXEMBOURG ECONOMIC UNION (see also AUSTRIA).

The commercial relations between the Benelux countries (Belgium, Luxembourg and the Netherlands) for a two-year period dating from 1 June 1947 were stated in an agreement of 4 July 1947. On 1 July 1949 the Benelux countries are to enter provisional and on 1 July 1950 complete economic union.

At the end of 1948 a Joint Benelux Commission fixed a plan for exports from the Belgo-Luxembourg Economic Union to Indonesia, providing for the supply of 30 million florins worth of goods (rolling mill products, textiles, non-ferrous metals, electrotechnical equipment, railway material). Additional lists of Union exports to the Netherlands include coal, jute yarns, chemical products, glassware, textiles.

□

A trade agreement between the Belgo-Luxembourg Economic Union and Finland, signed on 16 December 1948 covers the period until 5 November 1949, and provides for a commodity exchange to the value of 2,000 million Belgian francs (6,200 million Finnish marks) for each signatory as against 3,000 million Belgian francs as stipulated in the previous agreement.

□

An additional protocol to the trade agreement between the Belgo-Luxembourg Economic Union and the French, U. K. and U. S. Occupation Zones of Germany (Trizonia) fixes the volume of the respective commodity exchange. Trizonia is to supply goods (chemicals, steel, iron, finished metal products, glassware, pottery, optical instruments, agricultural and animal products, electrotechnical equipment) to the value of 32,693,000 U.S. dollars; and is to receive in return non-ferrous metals, machinery and equipment, chemicals, other agricultural products and foodstuffs, to the value of 71,523,000 dollars.

□

The Belgo-Luxembourg Economic Union and Greece have signed an agreement on trade and payments covering an exchange of goods to the value of 650 million Belgian francs in each direction. The agreement which is valid until 30 June 1949 provides for Greek exports of agricultural products such as raisins, figs, wines, tobacco, ores and other goods in return for imports of industrial products, including chemicals, motor tyres, hides, textiles, paper, glass, agricultural machinery, and metal articles.

□

The Belgo-Luxembourg Economic Union and Hungary signed a trade agreement on 19 February 1949 providing for goods exchange to the value of 900 million Belgian francs in 1949. Hungary will export foodstuffs, timber, machines and agricultural equipment and will receive in return feeds, metal products, chemicals, photographic material.

□

The Belgo-Luxembourg Economic Union and Norway signed in Brussels on 8 March 1949 the fourth additional Protocol to their trade agreement

of 21 February 1948, to provide for the commodity exchange in the first half of 1949. Norway is to export whale oil, fresh and frozen fish, iron alloys, cellulose and to receive in return rolling mill products, machinery, textiles and chemicals. It is intended to take up in June 1949 negotiations with a view to providing for the goods exchange from 1 July 1949 to 30 June 1950.

○

The **Belgo-Luxembourg Economic Union** and **Portugal** have signed a trade agreement covering their 1949 commodity exchange to the value of 1,100 million Belgian francs both ways. Portugal will export port and other wines, coffee, fruit, leather, pyrites, sisal, dyes, timber; and will receive in return iron and steel products, cement, chemicals, textiles, non-ferrous metals, glassware, potatoes, cigars, papers.

○

According to a new trade agreement between the **Belgo-Luxembourg Economic Union** and **Sweden**, goods to the value of about 3,358 million Belgian francs will be exchanged in 1949. Exports from Sweden will include foodstuffs, minerals, wood pulp, paper, iron, steel products, metal and chemical products. The Economic Union will supply agricultural and horticultural products, coal and coke, chemicals, photographic goods, leather and skins, rubber goods, textiles, glassware, non-ferrous metals, metal goods, iron and steel.

○

The Swiss Federal Council approved the Tariff Convention drafted recently by **Belgo-Netherlands Luxembourg** and **Swiss** delegations. The Benelux countries accorded to Switzerland customs reductions on textiles, pharmaceutical products, footwear, some metal products and watches, whereas Swiss cheese benefits by customs franchise.

○

A trade agreement between the **Belgo-Luxembourg Economic Union** and **Turkey** covering the period from 15 December 1948 to 30 June 1949 provides for a commodity exchange to the value of 500 million Belgian francs both ways. Turkey is to supply agricultural products, foodstuffs and minerals and is to receive in return iron, steel, non-ferrous metals, textiles.

○

A trade agreement between the **Belgo-Luxembourg Economic Union** and the **United Kingdom** has been reached on a programme of trade during the first six months of 1949. It covers the U.K. requirements of steel and flax and other goods to a total value of 20 million sterling. Belgium and Luxembourg will seek ways and means of increasing imports from the United Kingdom and the sterling area. A limited resumption of tourist traffic has also been arranged.

○

A trade agreement signed by the **Belgo-Luxembourg Union** and **Yugoslavia** provides for Yugoslav exports of maize, timber, zinc, and lead, in return for chemicals, raw materials, metal products, machinery and electrical equipment. In addition an

agreement has been reached on indemnification of Belgian claims arising out of the Yugoslav nationalization measures; indemnification is to be paid by a capital gradually accruing from an increasing ratio of Yugoslav exports in excess of Benelux exports to Yugoslavia.

BELGIUM.

An agreement signed between **Belgium** and **India** provides for deliveries by Belgium of 100,000 tons of steel, 8,000 tons of copper, 800 tons of zinc, 4,000 tons of lead in return for jute, tea and 100,000 tons of manganese.

○

A trade and payments agreement between **Belgium** and **Italy** increases the volume of commodity exchange up to 7,000 million Belgian francs (about 90,000 million Italian lire). Belgium is to export copper, tin, iron and steel products, palm oil, manganese; Italy will supply fruits, vegetables, rice, textiles, machines, precision instruments.

BULGARIA (*see also* AUSTRIA).

The **Bulgarian-Italian** trade agreement which has been in force since 20 December 1947 has been extended over another year, neither signatory having given notice.

○

Bulgaria and **U.S.S.R.** signed on 18 January 1949 a 1949 trade agreement which is intended to increase the mutual commodity exchange between both countries by 20 % over the 1948 trade.

CZECHOSLOVAKIA (*see also* ALBANIA).

The **Joint Czechoslovak-French Economic Commission** agreed at the end of March 1949 to increase the volume of goods exchange by 1,000 million francs both ways. In addition to previously stipulated quota exports, France is to supply potatoes, pork, and machinery whereas Czechoslovakia will deliver coal tar, cellulose and various industrial products.

○

Czechoslovakia has agreed to include the **French Occupation Zone of Germany** in the existing trade agreement with the U.K. and U.S. occupation zones.

○

Czechoslovakia and the **Soviet Occupation Zone of Germany** have extended the validity of their present trade agreement until the end of 1949. The volume of commodity exchange has been increased to 40 million dollars. Czechoslovakia will export mainly coke and receive in addition to goods mentioned in No. 7, 1948 of this Bulletin, p. 582, potassium.

○

A new trade agreement between **Czechoslovakia** and **Iceland** provides for goods exchange to the value of 450 million Czechoslovak crowns as from 1 March 1949 over a period of 14 months. Iceland will supply fish and fish oil, and will receive in return machinery, vehicles, textiles, rubber products, sugar, paper, glassware.

The first trade agreement between **Czechoslovakia** and **India** to run from 1 April to 31 December 1949 provides for the exchange of Czechoslovak machinery, chemicals and paper against Indian jute, manganese ore, leather and oilseeds to the value of about 1,000 million crowns.

A trade agreement signed on 24 December 1948 in Prague between **Czechoslovakia** and **Rumania** provides for a 1949 commodity exchange to the value of 3,500 million Czechoslovak crowns. Czechoslovakia is to export, *inter alia*, coke, steel products, rolling mill products, fire resistant material, machinery, instruments, chemical products, naphtha by-products, zinc, talc, special kinds of wood, and is to receive in return Rumanian maize, wheat, lard, poultry, petrol, and other raw products.

On 2 February 1949, **Czechoslovakia** and **Sweden** extended their expiring trade agreement of 1945 until January 1950. Czechoslovakia will concentrate her exports on sugar, chemicals, hops, rolling-mill iron, glasswork, chinaware, footwear, gloves, automobiles, and knitted goods, in return for salt and frozen fish, dried milk, typewriters, ferro-alloys, ball bearings, pyrites. Both signatories have extended their existing payment agreement of October 1947 until January 1950.

A new agreement has been signed by **Czechoslovakia** and **U.S.S.R.** providing for an additional 20 million dollars' worth of trade each way. Soviet raw material including non-ferrous metals, iron ore and buna will be exchanged for Czechoslovak manufactured goods.

DENMARK (*see also* BELGO-LUXEMBOURG ECONOMIC UNION).

A supplementary agreement between **Denmark** and **Belgium** provides for Danish exports of butter, eggs, horse meat, herb seeds, poultry and apples, against Belgian imports of rolled metal products, metals, chemicals, fibres, tyres. The value of the commodity exchange is to reach 35 million crowns each way. At the same time, an additional protocol foresees the exchange in 1949 of 150,000 tons of Belgian rolled-metal products against 10,000 tons of Danish butter.

Denmark and **Finland** signed a supplementary agreement which extends the validity of their present trade agreement until 1 May 1949, and which provides for Finnish exports (timber, cellulose, plywood, newsprint, porcelain, machinery) to the value of some 57 million Danish crowns against Danish exports (of butter, hog fat, bacon, malt, grains, textiles, pharmaceutical products, dyes, electrical equipment, machinery) to the value of 52.51 million crowns.

An additional protocol to the agreement between **Denmark** and western **Germany** is announced from Frankfurt. It provides for Danish exports of agri-

cultural products, horses, cattle, but foresees no German exports to Denmark.

Denmark and the **Soviet Occupation Zone of Germany** signed a trade agreement (subject to ratification by the Governments concerned) covering 1949 commodity exchange to the value of some 18 million Danish crowns. Denmark will export fish (50 % of the total export quota), cheese, eggs, potatoes, poultry, casein, potato seeds, and will receive in return textiles, coal, kaolin, metals, spare parts for automobiles and bicycles, surgical equipment, optical instruments.

Denmark and **Greece** have recently signed an agreement providing for an exchange of 2,930,000 dollars' worth of Danish goods (mostly agricultural produce) for Greek wines and tobacco.

A new supplementary agreement to the **Denmark-Spain** trade agreement of 16 March 1948 provides for commodity exchange to the value of 14 million Danish crowns both ways. Danish exports: potatoes, grains, casein; Spanish exports: cork, salt, iron pyrites, oranges, wine, almonds.

Denmark and **Sweden** made a trade agreement covering the period from 1 February 1949 to 1 January 1950. The goods exchange will amount to 140 million crowns on the Swedish side and 127 million crowns on the Danish side. Sweden is to export industrial equipment, chemicals, timber, wood pulp; and is to receive meat, sugar, eggs, cheese. An agreement on trade and payment signed by **Denmark** and **Turkey** in December 1948 provides for goods exchange between the two countries. Payments will be effected in the national currencies, according to their dollar ratio.

FINLAND (*see also* BELGO-LUXEMBOURG ECONOMIC UNION, **DENMARK**).

Finland and **Sweden** signed a trade agreement for the period from 1 April 1949 to 31 March 1950 providing for Swedish exports amounting to 58 million crowns against imports from Finland to the value of 54 million crowns. In addition Finland is to supply timber not included in the agreement, according to Swedish requirements. Finnish exports will be mainly machines, instruments, copper, bacon, whereas Swedish exports include iron ore, rolling mill products, telephone and telegraph material, and spare parts for motor cars. Another agreement provides for the payment of Finnish debts to Sweden, this to be started in 1953.

After expiry of the agreement of 25 July 1947, **Finland** and **Trizonia** signed a new agreement on 3 February 1949, providing for goods exchange to the value of 20 million dollars. Finland is to export cellulose, wood pulp; newsprint and wood products, and to receive coal, coke, machinery, chemicals.

After the expiry on 15 May, 1946 of the previous agreement, a recently signed trade agreement

between **Finland** and **Turkey** makes the resumption of goods exchange between the two countries again possible.

Finland and the **United Kingdom** signed a trade agreement covering the exchange of Finnish timber, wood pulp, newsprint, against British petrol, steel, textiles, chemicals, and manufactured goods.

Finland and the **U.S.S.R.** have signed a new trade agreement providing for commodity exchange to the value of 90 million U.S. dollars. Finland is to supply electric motors, equipment for the lumber industry, prefabricated houses, cellulose, and timber and to receive in return 80,000 tons motor fuel, 150,000 tons wheat, and 15,000 tons oats.

Our readers are requested to note correction of an error occurring in the last sentence of the item on Finland-Soviet Zone of Germany trade agreement in No. 1 of this Bulletin, 1949, on page 35. This sentence should read: 'Finland is to send paper, iron ore and cellulose and will receive textiles, chemicals, engines and optical products'.

FRANCE (*see also CZECHOSLOVAKIA*).

Note 'Moniteur Officiel du Commerce et de l'Industrie', No. 1333, 3 February 1949, gives a survey of trade and payment agreements between France and other countries in force by 15 January 1949, or being renewed.

France and **Hungary** have extended the validity of their trade agreement of 22 November 1947 to 30 April 1949.

On 26 March 1949, **France** and **Italy** signed four documents, with a view to establishing Customs Union between their two countries and to extending to the end of June 1949 the validity of their trade and payment agreement of March 1948. Newly fixed import and export quotas provide for expansion of the commodity exchange. A new lira-franc exchange rate, subject to the approval of the International Monetary Fund, has been agreed on (180 lire = 100 French francs; previously 220 lire = 100 French francs), a new rate of exchange has been fixed on 1 June at lire 175 = frs. 100. Provision has also been made for the transfer of Italian workers' earnings in France to Italy.

France and **Norway** have agreed on additional quotas for their goods exchange. France is to export iron, steel, electrical equipment, textiles and chemicals, and is to receive wood pulp, paper, oil, iron ore and furs.

France and **Poland** signed in Paris a trade agreement covering commodity exchange to the value of 6,000 million French francs on both sides in 1949. French exports comprise: combed wool, phosphates, iron ore, dyes, and engineering material; Polish exports, coal (875,000 tons) in addition to earlier stipulated coal deliveries (1,125,000 tons), feeds, sugar, raw materials for the chemical, industry.

It was announced in Paris that additional trade exchanges between **France** and **Portugal** in the framework of the present trade agreement have been set up. France will deliver certain medicaments (20 million francs' worth), essential oils (50 million francs) mechanical and electrical household equipment (745 million francs), tyres, electric and water meters (100 million francs) and other miscellaneous products. Portugal is to supply among other things coffee, 200 tons of wolfram, sheep and goat skins, and sperm oil.

In Paris on 25 February 1949, **France** and **Sweden** signed a trade agreement covering a period of one year as from 1 November 1948. The total volume of the goods exchange will amount to 580 million crowns. French main exports: textiles (75 million crowns), potassium salts, raw phosphates, dyes, chemicals, gypsum, wines and liqueurs, steel plates, automobiles, tinned fish, cacao, bananas; Sweden's exports: timber products, cellulose, machinery, agricultural tractors, ball bearings.

GERMANY

Bizonia

The Governments of **United Kingdom** and **United States of America** have extended for three months, by an exchange of notes dated 31 December 1948, the agreement fusing economically their respective occupation zones of Germany. This agreement was effected 2 December 1946, and revised 17 December 1947.

A trade agreement between **Bizonia** and **Greece** provides for a goods exchange worth 3.5 million sterling. In return mainly for iron ore, magnesite, dried fruit, Western Germany will export chemicals, coal, textiles and manufactured goods. A later announcement by the Joint Export-Import Agency (JEIA) gave information on a Greek-Trizonian agreement covering Greek exports to the value of 8 million dollars. The Joint Export-Import Agency in Frankfurt announced that the recently concluded **Swedish-Bizonal** trade agreement provides for 62 million dollars' worth of Bizonal exports against Sweden's 77 million. The agreement is to be extended in the near future to the French zone. Bizonal exports include one million tons of coke, 200,000 tons of scrap and machinery and chemicals. Swedish exports comprise iron ore, cellulose, paper, ferro-alloys, machinery, and chemical products.

Trizonia (*see also BELGO-LUXEMBOURG ECONOMIC UNION, CZECHOSLOVAKIA, DENMARK, FINLAND*).

On 10 April 1949, the Governments of **France** the **United Kingdom** and the **United States** agreed to concede full legislative, executive and judicial powers to the **Federal State of Germany** with the exception of certain reserved rights among which is foreign trade. The **Federal State of Germany** consists of the three respective occupation zones of Western Germany.

The **Trizone** (**French-U.K.-U.S. Occupation Zones of Germany**) and the **Netherlands** signed an agree-

ment on 21 December 1948, providing for 17 million dollars exports from Germany and 29 million dollars exports from the Netherlands.

The **Trizonia-Poland** trade agreement of 20 December 1948 provides for German exports of chemicals, industry products, optical instruments, precision machines, electrical equipment to the value 13.2 million dollars, in return for Polish rye, oats, sugar, potato flour, paper pulp, magnesium, to the value of 14.6 million dollars.

The **French-U.K.-U.S. Occupation Zones of Germany (J.E.I.A.)** and **Spain** signed a trade agreement on 18 December 1948. The trade volume for 1949 was fixed at the value of 11 million dollars for both partners. Spain exports: ore, metals, fruits, chemicals, felts, cork; German exports: machinery, electric equipment, potato seeds. The Trizone in addition was commissioned to execute some construction projects in Spain. The validity of this agreement is to be extended over another year unless notice is given to the contrary.

A new trade agreement between **Trizonia** and **Yugoslavia** was signed in Frankfurt on 31 March 1949. It calls for Trizonia to send this year to Yugoslavia nearly 19 million dollars worth of goods, more than half of it being machinery (Diesel engines, spare parts for steelmaking equipment, machine tools, metal-working and wood-working equipment). The bulk of the remaining German exports are chemicals. Yugoslavia is to export 15.8 million dollars' worth of food — principally corn and beans — crude drugs, pyrites, copper, antimony, mercury, bauxite, and caustic magnesite.

Soviet zone (*see also* CZECHOSLOVAKIA, DENMARK, FINLAND).

A supplementary agreement signed in Berlin by the **Soviet Occupation Zone of Germany** and **Sweden** provides for Swedish exports of fresh and salt fish, (7.6 million Swedish crowns) in return for household equipment, textiles, kaolin, chemicals, musical instruments, cameras.

GREECE (*see also* BELGO-LUXEMBOURG ECONOMIC UNION, DENMARK, GERMAN BIZONE).

The validity of the expiring **Italo-Greek** reciprocity agreement of 31 March 1947 was extended until 28 February 1949 and at the same time negotiations with a view to concluding a new agreement were started. On 14 April 1949, a trade and payment agreement was signed by Greece and Italy in Rome. It covers the period from 15 April 1949 to 14 April 1950 and provides for exchange of Italian machinery, instruments, glassware, chemicals and pharmaceutical products, paper, rubber goods, textiles, breeding animals, rice, medicinal plants, cheese, condensed milk, timber products against Greek tobacco, dried grapes, cigarettes, and other raw materials.

Greece and the **Netherlands** made an agreement covering 5 million dollars' worth Dutch supplies of condensed and dried milk, cacao, breed animals

rubber, raw hides, tin, electro-technical and telephone equipment.

HUNGARY (*see also* BELGO-LUXEMBOURG ECONOMIC UNION, FRANCE).

A trade and financial agreement between **Hungary** and **Egypt** has been signed in Cairo. The agreement, which is valid for one year, provides for an exchange of Egyptian commodities — mainly cotton, cotton yarn, linseed, raw wool, and calcium phosphate — against Hungarian paper, timber, mineral oils, glassware, and electrical and telephone and railway equipment. Payments will be made in Egyptian pounds.

Hungary and **Israel** signed a trade agreement in Budapest on 14 January 1949 providing for goods exchange to the value of 8 million dollars. Hungary will export mainly foodstuffs and certain finished products in return for scrap iron and other goods.

Hungary and the **Netherlands** signed a trade agreement, subject to ratification, covering their commodity exchange to the value of some 40 million florins both ways. Hungarian exports: machinery, rolling mill products, maize, barley, oats, railway, materials, tubes and tobacco; Dutch exports: artificial silk yarns, chemical and pharmaceutical products, machinery, tin, rubber, tea, tobacco, electrical and technical equipment, linseed.

ICELAND (*see also* CZECHOSLOVAKIA).

A trade agreement between **Iceland** and the **Netherlands** was signed in the Hague. The commodity exchange in the period from 1 December 1948 to 30 November 1949 will comprise on Iceland's side mainly fish and fishmeal, on the Netherlands' side, fresh and dehydrated vegetables, fats, oil, butter.

ITALY (*see also* AUSTRIA, BELGO-LUXEMBOURG ECONOMIC UNION, BULGARIA, FRANCE, GREECE).

Italy and **Chile** signed a cooperation protocol in Santiago de Chile on 24 March 1949, which is to serve as a basis for the forthcoming trade agreements between the two countries.

A commercial agreement was signed by **Italy** and **Lebanon** in Beirut on 16 February 1949, within the framework of a cultural, friendship and navigation treaty. Details have not yet been disclosed.

The agreement between **Italy** and the **Netherlands** signed in December 1948 provided for the commodity exchange between both countries for the period from 15 December 1948 to 1 March 1949. On 15 March 1949 both countries signed a one-year trade agreement calling for the exchange of some 18 million lire' worth of goods both ways, as from 1 April 1949. Italian exports will include mainly fruits and vegetables, rice, cheese, wine, flax, tobacco, flowers, textiles, machinery, dyes, whereas Dutch exports will comprise colonial prod-

ucts, cattle, butter, cheese, eggs, poultry, fish, oats, rye, sugarbeet, seeds, linseed, bulbs, chemicals, iron, electrical equipment.

The **Italo-Polish** trade agreement which was to expire on 31 December 1948 was extended until 28 February 1949.

The **Italo-British Economic Committee** examined from 31 January to 5 February 1949 the plan of commodity exchange for 1949 between **Italy** and the **Sterling Area**. It is expected that the value of goods exchange will amount to some 80/85 million sterling both ways (about 60 million pounds last year). Italy will export flax, tannin extracts, mercury, tobacco, horticultural products, cheese, wines, textiles, hats, footwear, etc. and will receive mainly raw materials, coal, chemicals, textiles, iron and steel products, electrical and radio equipment, agricultural tractors under 30 h.p. etc.

Italy and **Uruguay** signed in Montevideo at the beginning of April 1949 a joint 'Friendship and Collaboration Declaration' which, *inter alia*, calls for intensification of economic collaboration between the two countries.

An agreement signed in Udine, Italy on 3 February 1949 between **Italy** and **Yugoslavia** provides for the goods exchange in their frontier zone (province of Gorizia on the Italian side, parts of the province of Udine and the districts of Tolmino, Gorizia, Sezana, Postojina on the Yugoslav side).

NETHERLANDS (see also **AUSTRIA**, **BELGO-LUXEMBOURG ECONOMIC UNION**, **GREECE**, **GERMAN TRIZONE**, **HUNGARY**, **ICELAND**, **ITALY**).

A trade agreement signed between the **Netherlands** and the **Allied Military Command in Japan** makes possible the resumption of both Government and private commerce between the two countries. The trade volume for 1949 was fixed at 89 million dollars. The Netherlands will export foodstuffs, bauxite, tin, rubber, salt, sisal, felts, chemicals, bones and other raw materials, and receive in return cotton stuffs, electric equipment, drugs, paper. The agreement covers the period from 1 October 1948 to 30 September 1949.

The new trade agreement between the **Netherlands** and **Poland** provides for goods exchange to the value of 57 million florins both ways. Dutch exports: rubber, copra, tin, butter, vegetable and mineral oils, linseed, dyes, electrical equipment, chemicals, wireless equipment; Polish exports: coal, steel products, machinery, chemicals, textiles, timber, glassware, chinaware, cement, paper. An additional protocol provides for Dutch deliveries of vessels and harbour equipment to be paid for by Polish shipments of coal (to the value of 5 million sterling).

The **Netherlands** and **Switzerland** have extended until 28 February, 1949 the validity of their trade agreement of 30 December 1947, pending negotiations with a view to a new trade agreement.

The **Netherlands-United Kingdom** trade will amount in 1949 to some 60 million pounds in both directions according to the results of the negotiations between the delegations of both countries between 31 January and 28 February 1949. Among the food and agriculture items to be delivered by the Netherlands figure largely milk products, bacon, eggs, fresh vegetables, fresh fruit, meat products, and livestock.

A payment agreement between the **Netherlands** and **Uruguay** came into force after ratification by the Uruguay Parliament as from 22 November 1948. The agreement covers the period of one year and will be extended over another year unless three months' notice is given. The balance resulting from the commodity exchange between the signatories is to be settled in dollars or in gold.

NORWAY (see also **BELGO-LUXEMBOURG ECONOMIC UNION**, **FRANCE**)

Norway and **Poland** concluded in Warsaw on 8 January 1949 a trade agreement on commodity exchange in 1949 to the value of 142 million Norwegian crowns. Poland will export coal, coke, iron, steel, sugar, textiles, and chemicals, and will import iron ore and fats.

A protocol signed in Moscow on 10 January 1949 provides for 1949 commodity exchange between **Norway** and **U.S.S.R.** Soviet exports: wheat (100,000 tons), rye (50,000 tons), maize (25,000 tons), raw phosphates, manganese and chrome ore, rock salt, asbestos, paraffin, glycerine; Norwegian exports: pyrites (25,000 tons), fish, aluminium (3,000 tons), cellulose. In addition another protocol provides for an exchange of Soviet wheat (75,000 tons), and rye (40,000 tons) against Norwegian whale oil, herrings, aluminium in the next three years. This year's quota has been included in the quotas under the first agreement.

POLAND (see also **ALBANIA**, **GERMAN TRIZONE**, **ITALY**, **NETHERLANDS**, **NORWAY**).

A trade agreement between **Poland** and the **United Kingdom** of 14 January 1949, covering a five-year period, provides for commodity exchange amounting to about 130 million pounds on each side. Britain is to supply machinery, capital investment goods, wool, rubber, oil, copper, tyres, dyes, in return for Polish bacon, eggs, timber and other products.

An additional protocol, signed on 15 January 1949 to the **Poland-Soviet Union** 1,000 million dollars five-year trade agreement calls for a commodity exchange in 1949 valued at 715 million rubles on each side, which is more than three times the 1948 turnover (225 million dollars). The Soviet Union is to export cotton, iron, manganese, chrome, ores, cars, tractors, agricultural implements, chemicals and oil products; Poland will export coal, railway rolling-stock, iron and steel manufactures, non-ferrous metals, textiles, sugar.

○

A Polish-Yugoslav trade agreement for 1949 was signed in Belgrade on 17 January 1949. Poland will export coke, rolling-mill and technical products, in return for Yugoslav minerals, timber, tobacco.

PORTUGAL (*see also* BELGO-LUXEMBOURG ECONOMIC UNION, FRANCE).

A new agreement on the Portugal-Spain commercial relations, which have considerably increased in recent years, contains notably provisions for Spanish imports of cattle, tin, timber, rubber and other raw materials originating from the Portuguese colonies. Spain is to export iron products, chemicals and pharmaceutical products and is to supply Portugal with sea transport services.

RUMANIA (*see also* CZECHOSLOVAKIA).

Rumania signed a trade agreement with U.S.S.R. covering their 1949 commodity exchange to the value of 930 million rubles both ways. U.S.S.R. will supply industrial equipment and machinery, automobiles, metals, agricultural machines, ferrous minerals, coke, cotton seeds, whereas Rumania is to export petrol, timber, locomotives, chemicals, meat, consumer goods.

SPAIN (*see also* DENMARK, GERMAN TRIZONE, PORTUGAL).

The validity of the Spain-Switzerland trade agreement of 7 July 1945 has been extended until 15 April 1949.

SWEDEN (*see also* BELGO-LUXEMBOURG ECONOMIC UNION, CZECHOSLOVAKIA, DENMARK, FINLAND, FRANCE, GERMAN BIZONE, GERMAN SOVIET ZONE).

Sweden and the Allied Occupation Authorities on behalf of Japan signed a trade agreement in Tokyo on 2 November 1948, fixing the volume of commodity exchange in 1949 at some 13 million dollars.

○

A trade and payment agreement signed by Sweden and the United Kingdom on 15 December 1948 provides for the commodity exchange between Sweden and the Sterling Area in 1949. The Swedish exports (timber, paper, cellulose, foodstuffs, iron, steel, iron ore, fish) are to amount to 800 million Swedish crowns (650 million in 1948) whilst imports (textiles, chemicals, machinery, coke, coal, petrol) will probably attain some 900 million crowns owing to licences unused in 1948.

SWITZERLAND (*see also* BELGO-LUXEMBOURG ECONOMIC UNION, NETHERLANDS, SPAIN).

A trade agreement between Switzerland and India was signed in Geneva on 18 March 1949. India's exports to Switzerland will include oil and oilseeds, jute, manganese ore, coffee, tea, mica and spices. Swiss exports will cover heavy electrical equipment,

electrical and medical apparatus, textiles, chemicals, dyes and pharmaceutical products.

○

Switzerland and the United Kingdom signed a trade agreement on 25 February 1949. One half of Switzerland's trade volume with Britain will consist of goods considered 'urgent' in Britain, the other half will be delivered in services considered 'less urgent'. No quota lists for British imports to Switzerland have been fixed. It is hoped that the agreement will also make possible an increase of Swiss exports to the Sterling Area.

TURKEY (*see also* AUSTRIA, BELGO-LUXEMBOURG ECONOMIC UNION, DENMARK, FINLAND).

Turkey and the United Kingdom have reached agreement on trade questions. Turkey resumed issuing licences for imports from Britain by mid-January 1949 after nearly three months' suspension due to sterling shortage. During the interval Turkey's sterling balance has increased and the Ministry of Commerce has now authorized a restricted range of British imports, such as machinery and pharmaceutical products up to a provisional ceiling of one million sterling.

○

Turkey has sold Britain 6,800 tons of this year's tobacco crop as part of a drive to regain a British market for Turkish tobacco.

UNITED KINGDOM (*see also* BELGO-LUXEMBOURG ECONOMIC UNION, FINLAND, ITALY, NETHERLANDS, POLAND, SWEDEN, SWITZERLAND, TURKEY).

The expiring trade agreement between the United Kingdom and Brazil was extended for three months at the end of January 1949.

○

The United Kingdom and Canadian Governments have agreed that the price to be paid by the United Kingdom for Canadian wheat in 1949/50 - the fourth and final year of the Anglo-Canadian Wheat Agreement of 1946 - is to be 2 U.S. \$ per bushel. The negotiators took into account the United Kingdom obligation under the clause in the agreement which provided that higher prices should be paid in subsequent years to compensate for the low prices charged in earlier years.

A financial agreement between the United Kingdom and Egypt signed in Cairo on 31 March 1949 provides also for the volume of goods exchange between the two countries in the period from 1 January to 31 December 1949. It has been agreed that the British exports to Egypt shall amount in 1949 to 47 million sterling.

U.S.S.R. (*see also* BULGARIA, CZECHOSLOVAKIA, FINLAND, NORWAY, POLAND, RUMANIA).

U.S.S.R. and India concluded a trade agreement providing mainly for imports to India of 40,000 tons of ammonium sulphate and great quantities of fertilizers. Calcutta reports say that negotiations are about to be completed for the barter of 10,000 tons of Indian tea for 100,000 tons of Soviet wheat.

According to a TASS news item, a **Soviet Union-Yugoslav** protocol, providing for the respective commodity exchange, was signed in Moscow on 27 December 1948. The trade volume has been fixed to an eighth part of the 1948 mutual trade.

YUGOSLAVIA (see also **BELGO-LUXEMBOURG ECONOMIC UNION, GERMAN TRIZONE, ITALY, POLAND U.S.S.R.**).

A one-year trade agreement subject to ratification, between **Yugoslavia** and **India** was announced from Bombay. Yugoslavia will supply, *inter alia*, maize, calcium, carbide, tea chests, newsprint, plywood, cement and asbestos, while India's shipments include cotton, cotton textiles, jute goods (15,000 tons), tea (60,000 lbs.) coffee, pepper, shellac (100 tons), spices and certain medicinal herbs and plants.

Yugoslavia and **Pakistan** have signed a trade agreement under which Yugoslavia will supply railway sleepers, cement, asbestos, roofing, maize, and chemicals, and Pakistan raw jute, cotton and other commodities.

F I S H E R I E S



Northwest Atlantic Fisheries

On 8 February 1949, the International Convention for the Northwest Atlantic Fisheries and the Final Act were opened for signature following an eleven-nation International Northwest Fisheries Conference convened by the United States on 26 January 1949 at Washington. The Conference was attended and the documents were signed by Canada, Denmark, France, Iceland, Italy, Newfoundland, Norway, Portugal, Spain, the United Kingdom and the United States; FAO and the International Council for the Exploration of the Sea sent observers to the Conference.

The over-all area covered by the Convention - divided into five sub-areas - generally comprises the waters off the west coast of Greenland, Labrador, Newfoundland, Nova Scotia and New England. The Convention provides for a Commission on which all contracting governments will be represented, and separate panels with particular jurisdiction over each of the sub-areas.

The primary function of the Commission will be to collect, collate, and disseminate scientific information on international fisheries in the Convention area. While the Commission has no direct regulatory powers, any panel may transmit through the Commission to the governments of such panel for appropriate action recommendations for measures, based upon scientific information, which are deemed necessary for maintaining those stocks of fish which support international fisheries in the Convention area. Within a specified time after action has been taken by the panel governments of each sub-area affected, such measures become applicable to all contracting governments.

Upon ratification by any four signatory governments the Convention will enter into force.

Italian fisheries specialists for Greece

Dr Ruggero De Angelis and Mr Mario Pochettino, Italian fisheries specialists, left Italy for Greece in mid May, to make a survey of and advise the Greek Government on the development of lagoons to increase fish production.

Dr De Angelis is a member of the 'Ispettorato Compartimentale per l'Agricoltura' (Agricultural Inspectorate) of Cagliari. Mr Pochettino is a member of the Laboratorio Centrale di Idrobiologia (Central Laboratory of Hydrobiology) in Rome.

Mr Pochettino is assisting Dr De Angelis on a survey of development possibilities of lagoons (waters connected with the sea), structure, hydrobiology, etc.

F O R E S T R Y



Fourth session of the ECE Timber Committee

The Timber Committee of the United Nations Economic Commission for Europe held its fourth session in Geneva from 7 to 10 March 1949.

Despite fears of a gap, a balance between softwood supplies and effective demand was achieved in 1948, and a similar adjustment might take

place in 1949, timber experts of twenty governments concluded after they had listed European softwood import requirements and prospective export supplies for 1949 and 1950.

Granting all difficulties connected with making forecasts, all information at present available to the Committee points toward a gap between European softwood requirements and future supplies from European sources. The situation as yet shows no signs of reaching a stable equilibrium.

The Committee agreed that the future timber supply position calls for its continued attention, 'and renders the early conclusion of the timber loan and the procurement of timber equipment from European sources particularly important'. Such early action 'appears to be the most immediate means to achieve an expansion of softwood production, and a further increase in exports'.

The ECE Timber Committee, in which the FAO actively cooperates, developed in its earlier sessions a scheme for increasing European timber export availabilities by facilitating the purchase of timber equipment from certain equipment exporting countries by means of loans from the International Bank for Reconstruction and Development.

Most recent negotiations for these loans show that an even larger proportion of timber equipment can be purchased in Europe than had previously been believed possible. This should result in a further reduction of the proposed International Bank loan of dollars to purchase timber equipment from dollar sources.

The Committee 'noted with satisfaction that the negotiations for loans to Finland and Yugoslavia had reached a very advanced stage and that the Governments of Austria and Czechoslovakia were now willing to initiate active negotiations with regard to the conclusion of the loan'.

It also registered the fact that Poland had no need to seek a dollar loan for the purchase of timber equipment because it has been able to obtain from European sources all the equipment needed to increase its timber exports to the extent suggested by the Timber Committee.

1948 Softwood Situation.

After a review of softwood production and trade in 1948, the Committee concluded that member governments had 'substantially complied with its recommendations' for increasing production. They reached this conclusion since it had been possible in 1948: (1) practically to cover effective demand (not real requirements, but what countries were willing and able to import), (2) to absorb all available export supplies from European sources with the exception of very small quantities of lower grade and unsuitable specification, and (3) greatly to reduce imports of timber from dollar sources.

Europe's production of sawn softwood attained 6.5 million standards in 1948. This constitutes a

5 % increase over the previous year. Finland, the Bizone and Poland are mainly responsible for this improvement which, on the other hand, was slightly offset by reduced output in Czechoslovakia and Italy.

Softwood stocks were almost 10 % lower at the end of 1948 than twelve months earlier.

Europe's major softwood exporting nations were able to raise their shipments to 2 million standards in 1948, which constitutes an increase of 270,000 standards over 1947. European exports to other continents showed an increase of 120,000 standards and shipments to Europe from European sources rose to 1.80 million standards compared to 1.66 in 1947.

There has been a notable change in the pattern of Europe's softwood imports. These reached 2.2 million standards in 1948. This was 200,000 standards less than in 1947. However, imports from European sources show a simultaneous increase of 230,000 standards. Imports from Canada and the United States, on the other hand, suffered a simultaneous decline from 790 thousand to 350 thousand standards. In this way, over 80 % of Europe's import requirements were covered in 1948 from European sources, and the proportion of North American softwoods dropped from 35 % to less than 20 %.

Outlook for 1949 and 1950.

Forward estimates of sawn softwood import requirements presented by importing countries reveal a rising tendency in effective import demands. Taking into consideration only the European importing countries, the stated import demands in 1949 reach 2.55 million standards, an increase of about 350,000 standards, or roughly 15 % over 1948. Their estimates for 1950 are 2.72 million standards. This is some 500,000 standards or 23 % more than the same countries imported in 1948.

'No similar export increases are in sight from European sources', the Committee pointed out. In fact, normal export prospects are placed at some 390,000 standards below 1948. And maximum exports for 1949 would still remain some 100,000 standards below the previous year. For 1950 export prospects are set even somewhat lower.

The ECE Timber Committee cooperates with the ECE Coal Committee in an effort to ensure an adequate supply of pitprops for Europe's coal mines. The Timber Committee found that against an estimated pitwood import requirement for 1949 of 5,342,000 m³, there is an estimated export availability of 5,254,000 m³. It declared however: 'there seems no doubt that supplies during 1949 will be fully sufficient to cover requirements'.

The Committee received a progress report on a study whose primary purpose is to achieve technical improvement in wood utilization. The Committee emphasized that this study did not seek economies in timber consumption through a reduction in quality or standards, nor through a systematic substitution of other materials for wood. The author of this study is Mr Jean Campredon, Chairman of FAO's Technical Committee on Mechanical Wood Technology. When completed, the study will be fully discussed by the Timber Committee.

Participation.

Representatives of the following countries took part in the session: Austria, Belgium, Canada, Czechoslovakia, Denmark, Finland, France, Greece, Hungary, Italy, Luxembourg, Netherlands, Norway, Poland, Sweden, Switzerland, Syria, United Kingdom, United States and Yugoslavia. The International Bank for Reconstruction and Development was represented by an observer. Secretariat services were supplied by a joint ECE/FAO staff.

Cork oak cultivation in Portugal

(Report presented by Mr R. Perez Durao, Forestry Engineer, on occasion of the FAO Group visit to Portugal).

Cork oak cultivation is limited to the Mediterranean zone and the most important stands occur in the Iberian Peninsula and North Africa, although groves are to be found in the insular and coastal zones of Italy in the south of France, the Greek Peninsula, Crimea and Transcaucasia.

In Portugal, the cork oak is of economic importance throughout the country because even in the areas where it now only appears in isolated clumps or where it has disappeared for some reason, it must formerly have been a dominant forest species.

In the zone to the south of the Tagus where the land is not split up into smallholdings and where the population is very small in number, the cork oak is most abundant and has subsisted in practically its original state. It occurs either in pure stands or mixed with the holm oak. The cork oak is also found in the centre and the north, though less frequently, scattered or else in mixed stands with the sea-pine and the Portuguese oak. Pure stands of a considerable size occur in the Trás-os-Montes region.

The area under this species approximates 690,000 ha., representing nearly 7.7 per cent. of Portugal.

During the period 1937 to 1946, exports of its valuable product - cork - averaged 145,000 tons,

and in 1947 some 170,000 tons were exported to the value of 750 million escudos, thus ranking cork third in Portuguese exports.

An additional income is obtained from using the acorns to fatten hogs, corresponding to an average annual weight of 19,500 tons, from tanning bark (2,000 tons) and wood and charcoal from felling-logs and thinning (about 1,155,000 tons).

Indirect benefits are also derived from the cork oak which cannot be estimated in immediate returns, such as the regularization of watercourses, fixation of the soil on slopes and protection of bordering fields. Consequently, the importance to Portugal of maintaining the cork oak forests in good condition is evident.

Because of the irregular formation of the cork oak stands, mostly of natural origin and having attained full growth without the intervention of man, in the past, to cover pressing needs, cereals had to be cultivated in the free space in these stands, an endeavour being made to disturb the biological equilibrium of the cork oak as little as possible.

Frequently also, thinning and felling operations in the cork oak forests were carried out to an excessive extent as regards both cutting and topping. Thus some cork oak forests became too sparse, while in some trees practically the entire crown had been removed in order to obtain sufficient light intensity for intercalary crops.

The high price attained for cork at a certain moment caused too intensive and too premature removal of the first cork layer, and no thought was given to the disastrous effects these erroneous methods of exploitation would have on the future condition of the stands.

The quality of the cork would have fallen off greatly and the trees degenerated if the State had not intervened in time to save this wealth.

The result is that Portugal still produces cork of sufficiently good quality to be considered the chief producer of this valuable substance.

The cork oak plantations which, because of their well cared for appearance could be called 'cork oak orchards', can be managed so as to obtain at the same time an important income from the cork and a rational utilization of the soil.

In the regions propitious for the cultivation of the cork oak, conditions should be such that the forest proprietor may reserve his land entirely for forest cultivation without resorting to intercalary crops and without abusive stripping nor to intensive pruning, and protect natural regeneration so that new trees replace those which die off. Training of the operators who collect the cork is desirable and practical courses in stripping, pruning and lopping should be intensified. These courses should be given by the Woods and Forests Department and the National Cork Junta (Junta Nacional da Corça).

Naturally, only the best trees should be exploited and those which are not likely to prosper or whose cork is of poor quality should be eliminated. Attention should be given to creating conditions which favour the biological complex through the introduction of forest species permitting a return to the desired equilibrium, and protecting the stands from parasite attack.

In addition to the need for endeavouring to improve the value of cork, I think that it behoves FAO to intervene in favour of intensifying Portuguese exportation, if possible in exchange for cereals which are short; this would help to prevent the disadvantage of intercalary cultivation in the cork oak groves.

The Portuguese Government has long given attention to the cork oak and started taking measures to ensure its protection as far back as the XVIIIth century.

Since 1927, however, Decree No. 13:658 provides for closer protection. Every effort is made to prevent stands being diminished, not only to guard the water reserves but also national industry and wealth.

Decrees Nos 15:020 and 27:776, passed in 1928 and 1937 respectively, regulate the cork industry and also thinning operations, at the same time maintaining close collaboration between the Woods and Forests Department and the Standing Cork Junta for joint action in protecting this national wealth. In order to obtain a better quality cork the trees are now to be stripped after a lapse of 10 years.

The legislative measures taken are based on the technical studies carried out by the Cork Oak Research Station, set up on 18 November 1931, which has contributed considerably towards improving the methods of exploiting the Portuguese cork oak forests.

The Woods and Forests Department has always made every endeavour to assure the conservation of this important forest wealth by giving the proprietors who desire to improve their groves, the technical assistance they need, never refusing their support in safeguarding this sector of the forest heritage of Portugal.

Protective forest belts in U. S. S. R.

The Council of Ministers of the U.S.S.R. passed a decree establishing a plan of planting protective forest belts along river banks to prevent erosion of fertile farm lands. Similar belts made up of shrubs will be planted in sandy regions near the steppe for fixing dunes which otherwise are frequently spread out by wind and destroy arable land and pastures. It is intended to realize the

plan by 1965; on the whole 6,148,900 hectares of land are to be planted with forests and shrubs.

To expedite the mechanization of the work connected in particular with the 1949-51 program 570 forest protection stations will be established. The standardized equipment of these stations which has already been approved will ensure the success of the planting and cultivation of trees.

The Ministry of Agriculture and the Ministry of Forests of the U.S.S.R. have organized six surveys to determine the areas to be planted with forest belts, all of which have already started their work; 120 specialists and scientists have been designated to take part in these undertakings.

(IAI Bulletin)

Afforestation in Albania

Albania's production plan for the crop year 1948-49 includes a scheme for expanding afforestation areas. Last autumn, 2.3 million young trees were planted in the afforestation of 200 ha. This spring, another 2.8 million young trees were planted. The total number of trees planted will be nearly double that of the preceding period.

Forestry Working Group for Latin America

As an outgrowth of the FAO-sponsored Latin American Conference on Forestry and Forest Products held in Teresopolis (Brazil) last year, FAO has established a Forestry Working Group for Latin America. Work will be under the direction of two forest technicians assigned from FAO's headquarters staff. Offices have been opened in Rio de Janeiro.

It is expected that forest development work in Latin America will proceed along two closely related lines. One will be concerned with opening up untouched or little developed forests, thus stimulating the economic and social development of the Latin American countries. The other main line of approach will deal with the necessity for bringing these forests, and others already exploited, under proper management, both to avoid dissipation of forest resources and to check erosion.

Over-all, the immediate objective is to provide the Latin American countries with lumber and other forest products badly needed for their own economic development. Beyond that, it is expected that development of the abundant forests of Latin America eventually will produce a sizeable export volume of forest products to relieve the world timber shortage.



The farm labour situation in France

Agriculture pratique * published a study by R. Fontaine on the features of the labour situation in France at the end of 1948.

According to official reports, the agricultural labour shortage in France is becoming increasingly acute. Although France is not an essentially agricultural country, it is primarily a rural nation. Nevertheless, the active agricultural population, according to the preliminary results of the 1946 census, only numbers 7,400,000.

The writer divides the agricultural workers into two groups: permanent labour, that is, employed throughout the year and non-permanent labour which includes semi-permanent, seasonal and temporary workers.

After the liberation, France had a considerable supplementary supply of permanent labour provided by prisoners of war. On 1 January 1948 there were as many as 104,000; on 1 October following, they only numbered 21,000 and before the end of the year all the prisoners had been repatriated; those engaged as free workers nearly all asked to be repatriated on the expiry of their contract.

By 1 October 1948 the National Office of Immigration (ONI) had placed 27,000 foreign workers in agriculture. Results at first were not always satisfactory owing to the want of training on the part of the early contingents and the slowness in bringing in the workers. The ONI recently tried an experiment with 1,000 workers recruited from displaced persons and introduced direct into France. A number of volunteers for paid work in agriculture, chosen after examination of health and qualifications and from the security standpoint, are forwarded to special Centres in France where employers may apply for hands. Contracts are drawn up by the departmental Labour Boards. The workers bring their families. ONI always supervises the engaging of these workers.

* Paris - December 1948.

Beginning 9 October 1948, the cost of introducing foreign labour for agriculture was reduced from 6,000 to 1,500 francs.

The writer prepared a concise table of the requirements which had to be met by 1 October 1948:

	Men	Women	Total
<i>Immediate requirements</i> (labour liable to be engaged immediately)	15,000	9,000	24,000
<i>Effective requirements</i> after the departure of the prisoners of war and those engaged as free workers	40,000	13,000	53,000
<i>Normal requirements</i> (workers required to obtain a resumption of the normal activity of the farms or an increase in production (Monnet Plan).)	59,000	26,500	85,500

Up to 1 October 1948, the seasonal workers engaged for harvesting, grape-gathering, beet-lifting and similar operations attained the following figures:

	Belgians	Italians	Total
First quarter 1948.	0	0	0
April	452	2	454
May.	5,148	1,200	6,348
June	125	—	125
July	2,113	4	2,117
August	295	—	295
September	4,336	188	4,524
	12,469	1,394	13,863

The agricultural labour situation in France is not satisfactory; the number of supplementary workers, prisoners and foreign workers, placed by the ONI, has greatly diminished, and a further reduction in supply has been caused by the rural exodus and the repatriation of foreigners.

Working hours of agricultural workers in Sweden

(Abstract from 'Informations sociales', New Series, published by the ILO, 15/2/1949).

In Sweden, Law No. 281 of 4 June 1948, which became operative on 19 November 1948, regulated the length of hours of work for workers on all farms.

The length of the working period should not exceed 10 hours per day or 45 hours per week, from November to February included, and 50 hours from March to October included.

When the work is distributed between livestock care and other operations, from November to February, the maximum number of hours per week is 47. Operators engaged chiefly in livestock care may not work more than 9 hours per day, and 96 hours in a fortnight.

For horticultural workers, the maximum working period is 10 hours per day and 48 hours per week throughout the year, or else 45 hours per week from November to February and 50 hours per week from March to October.

Overtime cannot be worked for more than two consecutive days without permission granted, on application, by the Central Labour Council, unless in urgent cases — calving, foaling, etc., accident — for which overtime is permitted without special authorization.

○

The 'Czechoslovak Life' of 15 February 1949 informs on the work of the 'Village Theatres' which are touring the countryside. There are ten professional companies holding normally their first nights in Prague under the eyes of the critics and then starting their tour. In addition to that some fifty regional theatres with 'headquarters' in district towns make regular tours of the smaller towns in their districts three or four times a week. Plays by Czech classical and modern authors, Soviet playwrights, Polish, Bulgarian and Hungarian dramatists are very popular with the rural audiences. The population also appreciates greatly plays by Shakespeare, Molière, Gogol, Priestley and Shaw.

NEWS FROM AFRICA



Soil protection and restoration in Algeria

Mr R. Putod, Woods and Forests Inspector, discusses the question of soil restoration in Algeria in the 'Cahiers des Ingénieurs agronomes' (Paris, 1948, Nos 39-40).

He first of all points out the very considerable reduction in forest area in Algeria — according to different estimates, 7 to 20 million hectares in prehistoric times as against 3 million hectares today. As is known, the disappearance of the forests entails the destruction of cultivable land through runoff, especially on mountain or hill land, while the adjacent low-lying areas are threatened to an increasing extent by floods and drifting. Wind erosion also contributes to this danger by exposing the geological rock. All these causes of soil deterioration prevent agriculture from advancing in Algeria. The average production of cereals remains stationary (approximately 17 million quintals from 1900 to 1940). Stock-breeding has decreased except in the case of goats which can exist on the poorest pasture. Fruit arboriculture, on the other hand, has increased somewhat: 6 million olive-trees in 1900 — 10 million in 1947.

The writer notes that the agricultural and social problem in Algeria lies in the continuous increase in the population while the soil capital tends to diminish. 'How can this situation be remedied?'

The 'Paysanat' Service, re-organized in 1946, is endeavouring to fight pauperism. The operating units are the Rural Improvement Sectors (SAR — 'Secteur d'Améliorations rurales'). Advice on crop improvement and development of land is given by the Agriculture and Arboriculture Service. The Forest Administration, for its part, is endeavouring to restrict deforestation and to do some reforestation work. The war momentarily retarded the execution of these projects, but in 1940, at the request of the 'Service de la Colonisation et de l'Hydraulique', work was resumed. Operations include reforestation, protection and rational cultivation of crops on sloping ground, terracing of permeable soils, natural or artificial protection against landslips, draining off excess water, brush-planting, embankments, drainage, etc. and, in another field, appealing to the interest of the European and Moslem farmers.

The Soil Protection and Restoration Service was set up in 1941 by Government Decree, and re-organized in July 1945. Up to 1945, 50 series of experiments were carried out on 600 hectares. In 1945, 465 hectares were subjected to protective treatment, 300 ha. were planted to fruit trees and 76 ha. reforested. In 1946, 1,097 ha. were given protective treatment, 750 ha. planted to fruit trees and 236 ha. reforested. In 1947, these figures were 2,130 ha., 1,500 ha. and 300 ha. respectively. Operations in 1948 covered 5,000 hectares and will be extended at an increasing rate since millions of hectares require protection.

Assistance is also given by the Soil Restoration Service in the form of advice and loan of special equipment, supplies of fruit or forest trees, setting up nurseries which, for the next season, will

provide 300,000 fruit trees and one and a half million forest trees. In three or four years it is expected that these quantities will be increased to one and a half million fruit trees and 3 million forest trees. Experiments which should give very important results are now being carried out in the State forests. In concluding, the writer adds: 'The efforts of practically eight years work are beginning to show results. The protection of the mountain soil capital is well advanced. The achievements attained are due to the capacity of the foresters and agricultural experts, to their team spirit of mutual cooperation and their constant faith in success'.

Linseed cultivation in Tunisia

The following particulars have been taken from a report presented by Mr A. Durand, Delegate of the 'Pool du Lin en Tunisie', to the Farmers' Association of Tunisia, and published in '*La Revue agricole de l'Afrique du Nord*' *.

The crops, especially wheat, suffered greatly from the severe drought which hit Tunisia from the end of 1947 to February 1948. Flax, on the other hand, because of its tap-root, showed better resistance and was able to benefit from the late rains in March.

It was concluded from some hundred questionnaires addressed to planters and local observers 'that with a rainfall of at least 400 mm. flax reaps the closest, that is, the most expensive, cultivation care'. During the drought years when the rainfall did not even total 250 mm., the farmers lost on wheat, while flax, despite the reduced yield, still remained a profitable crop.

The regular commercialization of the flax crop in Tunisia produced 50,000 qls of oilseed, of which some few hundred quintals were stored or sold outside the Pool. The yield in the drought regions averaged 4 to 4.5 qls per ha. and frequently 10 to 13 qls in well cultivated fields; a record yield of 17.3 qls was reached.

After deducting the seed required for the next season, there was sufficient linseed to begin exports. Flax has not encroached on the area sown to wheat and barley as the following figures show:

Sowings in 1946:		
wheat and barley	1,000,000	hectares
Sowings in 1947:		
wheat and barley	1,365,000	"
flax.....	18,000	"

The sowings for the 1948-49 season look promising. Encouraged by the results obtained, many farmers have requested seed; in the regions where

the heavy rains may cause difficulties, deliveries were started in the first fortnight of November 1948. The seed from the Tunisian crop reserved under the supervision of the Pool required considerable cleaning and handling operations; no dodder was present. The Pool grants easy terms to reliable farmers who may pay in kind: 'The seed will then be returned to the consigner with bagging, weight for weight, if the seed is genuine and marketable (maximum impurity 2 per cent., broken seed 5 per cent.)'. Crop contracts covering all the terms of the agreement, will be presented by the consigners to the interested parties.

The Flax Pool, with the approval of the French Government, wishes to extend flax cultivation in Tunisia. The coefficient of 2.7 is being retained for the next crop, and measures are being studied to ensure the continuation of flax cultivation.

FAO ACTIVITIES



FAO's Director General in Asia

General Douglas Mac Arthur, Supreme Commander, Allied Powers, for the Far East, invited FAO's Director General, N.E. Dodd, to visit Japan during his tour of FAO Far East member countries.

Mr Dodd arrived in Tokyo on 17 March, remaining until 20 March. He was in Bangkok on 7 March to open the inaugural meeting of the International Rice Commission, sponsored by FAO as a means of bringing about cooperative action among nations to improve rice production and distribution within countries.

New Head of FAO's Agriculture Division

Dr F. T. Wahlen, professor at the Ecole Polytechnique Fédérale (Agriculture) in Zurich and a member of the Swiss Senate will become Head of FAO's Agriculture Division on 1 September 1949. Mr Norris E. Dodd, Director General of FAO expressed his thanks to the Government of Swit-

* 47h Year, No. 1536. Algiers, 1949.

zerland for lending FAO this 'distinguished, able and practical man'.

Dr Wahlen is an internationally known expert in agriculture and the technical sciences. He has a wide experience in governmental agricultural programs, including service with the Canadian Government, where he was chief of the Canadian State Agricultural Experiment Stations from 1924 to 1929. Following his service in Canada, Dr Wahlen took charge of the Federal Agricultural Experiment Station of Jeurich-Oerlikon in his native Switzerland and later became chief of the section for agricultural production and home economy at the Federal War Food Office. He is the originator of the plan for crop extension which bears his name and which insured enough food for the Swiss population during the war. In 1947 Dr Wahlen was elected Chairman of the Third Annual FAO Conference in Geneva.



Dr W. R. Aykroyd, Director of the FAO Nutrition Division in Headquarters, Washington, visited in May and June 1949, the following European and Near East countries: Egypt, France, Great Britain, Greece, Italy.



Dr P. S. Hudson, representing FAO's Agriculture Division, visited India and Pakistan and cooperated with the WHO and local officials in planning malaria control demonstrations in Terai and Iswargan Mymensingh areas. Both the areas are among the worst malaria-infested regions of the Far East.

6th Session of the Council of FAO

The 6th Session of the Council of FAO is now being held in Paris from 13-25 June. The following countries are represented on the Council: China, Cuba, Czechoslovakia, Netherlands, Philippines, United Kingdom, Brazil, Canada, Chile, Italy, South Africa, United States of America, Australia, Denmark, Egypt, France, India, Mexico.

We give below text of the Provisional Agenda:

1. *Omissis.*
2. *Omissis.*
3. *Report of the Director-General on his Mission.* (16 January - 17 April 1949).

The Director-General will report on his recent visits to England, Portugal, Spain, Italy, Greece, Turkey, Egypt, India, Pakistan, Siam, China, Japan, Korea, Singapore, Philippine Republic, and Australia.

4. *World Food and Agriculture Situation.*

Summary of food and agriculture situation (a fuller appraisal is currently being published by FAO).

Report on changed patterns of world trade, as requested by the Council (5th Session).

The Council may wish to consider —

(a) whether it should issue a statement of its views on the current position; and

(b) whether any specific study, recommendation or action is called for in the light of the world situation.

5. *International Distribution.*

Report from IEFC on its own future and that of the Commodity Committees.

Report from Commodities' Working Party established by the Council at its 5th Session.

The Council will be asked —

(a) to approve the report of IEFC; and

(b) to consider the recommendation of the Commodities' Working Party and decide what further action, if any, should be taken, or whether the report of the working party should be forwarded to the Conference.

6. *National Plans and Programs.*

Report on the work of the Council's Working Party which prepared the outline for the Article XI Reports and on arrangements for the proposed Plans and Programs meeting to be held prior to the Conference in each of the regions, as well as on documents in preparation for these meetings.

The Council may wish —

(a) to approve the action taken and the arrangements made; and

(b) to consider what role the Council itself should play at its next session in preparing findings for the Conference's Annual Program Review.

7. *Development Problems, including Financing and Technical Aid.*

Report on Financing Facilities.

The Council will decide whether further study is required or whether the report should be forwarded to the Conference.

Director-General's proposals for technical aid program (resolution of ECOSOC regarding Point 4 of President Truman's Inaugural Address).

Report of the Technical Coordinating Committee on this proposed program.

The Council —

(a) will consider the supplementary technical assistance program of FAO; and

(b) may wish to advise the Director-General on the arrangements proposed by the Administrative Committee on Coordination for discussion at the July session of ECOSOC (report to be circulated later).

8. *FAO's Work Program.*

Director-General's Report on 1949 Activities
Report on Publications Program.

Draft Program of Work for 1950.

Report of Technical Coordinating Committee on 1950 Program.

The Council will be asked —

- (a) to approve the 1949 arrangements; and
- (b) to express its views on the 1950 program and, subject to amendments, recommend its transmittal to member governments.

9. Finance.

Reports of the Committee on Financial Control.
Report of Committee on Scale of Contributions.
Draft Budget for 1950.

Audited Accounts for 1948.

The Council will be asked —

(a) to examine the reports of the Committee on Financial Control.

(b) to examine the recommendations of the Committee on Scale of Contributions and, subject to any modifications it may wish to make, forward the report to the Conference.

(c) to consider the draft budget and submit recommendations to the Director-General for his consideration before transmittal to member governments.

(d) to report to the Conference on the audited accounts.

10. Preparations for Fifth Session of the Conference.

Director-General's proposals including provisional Agenda.

The Council —

(a) will wish to consider the proposals of the Director-General concerning the organization and work of the fifth Session with a view to submitting recommendations to member governments.

(b) will be asked to approve the provisional agenda for transmission to governments.

11. Constitutional and Administrative Matters.

Report of the Committee on the site of permanent headquarters.

Report of the Committee on Relations with International Organizations.

Proposals by the Director-General for amendments to the Constitution and Rules of Procedure (related to Item 10).

Council will be asked —

(a) to decide what action should be taken on the question of the site and whether further work is needed.

(b) to express its views on the recommendations of the Committee on International Organizations, particularly regarding relations with non-governmental organizations.

(c) to decide whether it is necessary to submit proposals for amending the Constitution and Rules in order to carry out the Council's recommendations regarding the Conference procedures.

12. Omissis.

The *International Emergency Food Committee of the FAO Council* — formerly the International Emergency Food Council — was created in June 1946 to allocate short supplies for the duration of the world food emergency. It replaced the Combined Food Board which had been established during the war. When the transfer of the activities and responsibilities of the International Emergency Food Council to the Council of FAO took place at the end of 1947, the following 9 Commodity Committees of the IEFEC were operating: Cereals, Fats & Oils and Feeds, Peas and Beans, Cocoa, Rice, Meat and Meat Products, Sugar, Seeds, and Fertilizers (Nitrogen).

Recommendations of IEFEC have met with a high degree of compliance by member governments. As a result of the improvement in supplies in 1948 decisions were taken by the Commodity Committees to discontinue allocations, and at the end of April 1949 only the Rice Committee and the Cocoa Committee remained. The Rice Committee has recommended that rice allocations continue beyond 30 June 1949, and this matter will probably be dealt with when the FAO Council meets in Paris in June 1949.

The International Emergency Food Committee of the FAO Council which was a Standing Committee and the body to which all Commodity Committees reported their action, has decided on its own dissolution.

o

The activities during March 1949 carried out under the UNRRA transfer fund program concerned *agricultural fellowships* in various European countries, and plans for the meetings of specialists on *Organization of Agricultural Extension Work*; the meetings on *Insect and Plant Disease Control*, on *Improvement of Dairy Production and Marketing* may be cancelled or postponed, and that on *Most Effective Methods of Feeding Livestock* will be held in autumn 1949. Notice has been given that the shipment of *Hybrid Maize Seed* addressed to the Regional Office and destined for Austria, Hungary, Yugoslavia and Czechoslovakia arrived at the Regional Office and that the seed is now ready for distribution.

Working party of FAO Council begins study of intergovernmental commodity agreements

A comprehensive study of international commodity agreements, with special reference to 12 agricultural commodities important in world trade, was begun by a working party of the FAO Council in January 1949.

The commodities were wheat (including flour), sugar, coarse grains, rice, cotton, fats and oil (limited to edible oils, plus linseed oil), coffee, rubber, wool, dairy products entering into world trade (chiefly butter, cheese, and processed milk), cocoa and tea.

The working party on commodity problems, made up of government representatives, was set up by the FAO Council on the recommendation of the Fourth Annual Conference of FAO in Washington last November. The working party was to report to the Council at its first 1949 meeting, scheduled in Paris on 13 June. The Council, in turn, is to make a report and recommendations to FAO member governments.

The working party was made up of the representatives of Australia, Belgium, Brazil, Canada, India, the United Kingdom and the United States. At its organization meeting, the group named the Canadian representative, George R. Paterson, as chairman.

Opening the meeting, N.E. Dodd, FAO Director-General, referred to the appointment of the working party as 'one of the most important steps that FAO has ever taken'.

He pointed out that FAO's basic objectives, as set out in the Constitution, include 'securing efficiency of the production and distribution of all food and agricultural products', and that in the statement of functions it is provided that the Organization shall 'promote and, where appropriate, shall recommend national and international action with respect to... the adoption of international policies with respect to agricultural commodity arrangements'. Referring to a finding of the Preparatory Commission on World Food Proposals that the basis of all intergovernmental arrangements should be expansion of consumption and not restriction of production, Mr. Dodd recalled a Commission statement that the best laid plans for development of agriculture can be defeated by instability of prices. The Commission concluded that only by consultation and cooperation between governments can reasonable stability of agricultural prices be achieved, and that for many commodities the most satisfactory method would be intergovernmental commodity arrangements and agreements.

In pursuing its studies, the working party considered the role of FAO in relation to commodity studies and problems; analyzed the supply-demand position, current and prospective, for each commodity included in its review; reviewed past international action on each commodity and the nature of problems arising in developing suitable international action; and, finally, drew up recommendations for consideration of the FAO Council.

Intergovernmental commodity organizations already exist for wheat and flour, sugar, rice, cotton,

coffee, rubber, wool, and tea. The working party, assisted by the FAO staff, made the fullest possible use of information available from these organizations. It had also the help of the United Nations Interim Coordinating Committee for International Commodity Arrangements (ICCICA).

Major elements considered for each commodity under review included prices; quotas; scarcities (such as in rice); homogeneity (a problem of particular importance in dairy products and fats and oils); interchange ability, in use or in production; the effect of exchange difficulties and purchasing power on commodity agreements, and such measures as stock piling and special price schemes where these are appropriate for dealing with shortages or surpluses likely to arise after an agreement has been signed.

FAO collaborates with WHO on malaria fight

The provisional Memorandum prepared by FAO at the request of the Expert Committee on Malaria of the Interim Commission of WHO is reprinted in the 'Bulletin of the World Health Organization', Vol. 1, No. 2/1948, page 250. It points out that from the point of view of agriculture, malaria creates two separate types of problem. The first is the case where malaria is endemic in a thickly-populated area already under agricultural occupation, where the effect of the malaria is to sap the energy of the working population, and to increase, often at critical periods, the number of working days on which the worker is incapacitated by ill-health. The second is where malaria is preventing the development of an area otherwise suitable for agricultural development. Both these cases may again be divided on the one hand into the situation in which other factors are already favourable to the development of agriculture; on the other, into one in which they are at present unfavourable. Thus in a naturally rich agricultural area which already supports a farming population as efficient as health conditions permit, or in a potentially rich undeveloped area readily accessible to a congested agricultural area, it may be that the removal of the handicap of malaria will produce quick and spectacular development. In other areas there may be adverse natural or economic conditions which will check progress even if the malaria is eliminated; examples of this are poor soils, adverse climatic or water-conditions, unsuitable tenure systems, lack of agricultural knowledge, lack of credit, etc., and especially, in undeveloped areas, inaccessibility, lack of supplies or amenities, insecurity of person or property and the like. In such areas, from the standpoint of food-production, it may

scarcely be worth while to eliminate malaria unless other large-scale improvement plans are in prospect such as an important irrigation or drainage project or a comprehensive plan for organized settlement or colonization.

To assess the effect of malaria control, economic surveys should be made in rural areas selected for demonstration malaria-control projects. Such surveys should be made before the initiation of control measures and again at a later date when they have taken effect. FAO will be glad to give advice or assistance within the limits of its resources, regarding the organization and execution of these surveys.

It is suggested that when the time comes for selecting demonstration areas the simplest procedure may be for WHO to select a number of areas and for FAO to advise on the prospects of increased production in the areas named. A final choice could then be made after appropriate consultations.

FAO Commodity Series

No. 9 of the FAO Commodity Series is 'World Fibers Review 1948'. It contains information on the general fiber situation production, markets and prices, and deals in detail with natural fibers (cotton, wool, raw silk, flax, hemp, jute) and hard fibers (abaca, sisal, henequen). It consists of 72 pages, with 30 tables in text and 15 tables as appendices.

The 104-page 'FAO Grain Bulletin' — issued in English on the eve of the World Wheat Conference in Washington in January 1949 as No. 10 of the Commodity Series reviews the current world grain position. It states that the world grain situation at the beginning of 1949 is marked by improved supplies as compared with other post-war years. The total grain production of 1948 was considerably above that of 1947 and even above the prewar average and an unusually large volume of grain is now moving in international trade.

The 1948 harvest was favored by exceptionally good weather. While it is too early to forecast with assurance the size of the 1949 harvest of wheat and other grains, it is improbable that the high 1948 level will be reached.

Grain stocks, however, continue to be too low in most instances to give protection against emergencies. Over-all stocks in exporting countries are expected to be at about the same level as a year earlier. On the basis of the estimated export movement, stocks on 1 July 1949 should show a significant increase over a year ago for the United States, and possibly some increase for Eastern Europe, including the Soviet Union. The stock position should be relatively unchanged for Canada,

slightly reduced in Australia, and down in Argentina.

World opinion regarding grain appears to be largely divided into two groups. One group, including the exporting countries, now seems to be more concerned about the supply situation and surpluses which may not find markets, rather than shortages which have characterized the world position since the end of the war. The other group, including most of the major importers, continues to be concerned over the closeness of the present apparent balance between export supplies and world import needs. Though bread rations have been increased — and in some countries abolished — nearly three hundred million persons are still dependent on a rationing system for their daily bread. The short Argentina grain harvest, combined with the probability that 1949 world grain production will be below the high level of 1948, deepens the concern of this group.

The Grain Bulletin contains sections on The 1948/49 Position, the Feed Supply Situation in Europe, the Grain Outlook, and a Review of Cereals Committee Activities, along with an appendix giving statistics of grain areas, production, shipments and stocks, and comments, on bilateral agreements, wheat prices, and other topics, including some data on the 1948 Wheat Agreement.

Following is a table showing estimated world production of the five principal grain crops:

World production			
Product	Average		
	1934-38	1947	1948 (Preliminary)
million metric tons			
Wheat.	164.9	152.8	166.4
Rye	46.4	36.3	39.5
Corn.	114.7	121.2	151.8
Oats.	65.0	53.3	62.4
Barley.	51.3	46.2	51.9
Total	442.3	409.8	472.0

'Rice Bulletin' — No. 11 of the Commodity Series — is a 78-page illustrated publication with 25 tables in text and 19 tables as appendices.

It states that the world production of rough rice (paddy) in 1948-49 of approximately 145 millions tons was 2.4 million tons greater than the year before, but 2.9 million tons short of the prewar average.

Population in the rice-eating areas increased by nearly 100 millions in the decade 1939-48. This has increased consumption requirements by 10 per cent. over the prewar average.

In face of the fact that the deficit areas of the world have increased in extent, the surplus rice available for export in 1949 is less than one-half of the quantity which moved in international trade before the war.

Wholesale prices of rice have everywhere increased to at least 300 per cent. of the prewar level.

The rice shortage has induced the major deficit countries to import increased supplies of wheat, maize, barley, and millets as substitutes. In view of the improved supply position of these grains and the growing disparity between the prices of rice and other cereals, there is a possibility that rice may lose some ground in the competitive markets with other grains.

These unfavorable supply conditions persist even though rice-growing countries have made notable headway toward increasing the area planted in rice. Since 1946/47 the world area under rice has exceeded the prewar average. In 1948/49 the cultivated area is estimated at 2.5 million hectares above that average.

Ordinarily so substantial an increase in planted area would be accompanied by a corresponding increase in production. But unfavorable weather, shortages of agricultural requisites, such as machinery and materials for irrigation works, fertilizers, farm implements, and insecticides, and use of sub-marginal land have combined to yield unexpectedly low harvests for a succession of years.

In Asia, which accounts for 94 per cent. of the world area and production of rice, the planted area is estimated to have reached the prewar level in 1948/49. Yet, the continent's production is still 6.2 million tons below the average of the years just before the war.

Included in the new Rice Bulletin are sections on the World Situation and Outlook; Area and Production 1948/49; International Trade in Rice and International Emergency Food Committee Allocations; Rice Consumption; Rice Prices; and Progress of Rice Production and Distribution Programs. This latter section reports, country-by-country, on proposed measures for land reclamation and for increasing yield through extension of irrigation, drainage, and water-control systems; more and better application of manures and fertilizers; extensive use of high-yielding and disease-resistant seed; control of plant diseases and pests, and introduction of efficient tools, implements, and improved cultural practices.

The price of No. 9 of the Commodity Series is 25 U.S. cents, of Nos 10 and 11, 50 cents each; No. 9 has also come out in French, while Nos 10 and 11 are available for the time being in English only, at all sales agents for FAO publications. French and Spanish editions are in preparation.

FAO book on rural welfare

The 43-page booklet 'Essentials of Rural Welfare; An Approach to the Improvement of Rural Well-being' issued recently by FAO may be considered the first statement of welfare principles and

objectives which are applicable to the varied nations and areas of the world. It purports to define the nature of rural welfare and draw attention to the kinds of interrelationships which exist within it. The book which will prove useful to welfare and extension workers was prepared by Dr H. Belshaw, Director of the Rural Welfare Division of FAO and H. M. Spitzer of the same division. The English edition is on sale at 50 U. S. cents a copy; French edition is in preparation.

FAO reports on synthetic fats

Since it appears that the world shortage of fats will continue, FAO has drawn up a short 14-page summary on *Synthetic Fats - Their Potential Contribution to World Food Requirements*. FAO did the study to ascertain what contribution, if any, the manufacture of synthetic fats can make toward relieving the world fat shortage. The answer appears to be not very much at the present stage of development.

The First World War and the resultant fat shortage and high prices of fats and oils gave impetus to research bearing on the synthesis of fatty acids from hydrocarbons, particularly in Germany and Great Britain. Germany started making synthetic fats for human use in 1937. Operating at full capacity, a plant at Witten produced 31,000 tons of fatty acids annually. Five percent of the product was used for making edible fats and the rest for soap and industrial purposes. FAO recommends that Germany should continue the manufacture of synthetic fats for industrial purposes, since she is short of fats.

No final conclusion on the nutritional value of synthetic fats can be drawn at present. The available information emphasizes strongly the need for further experimental work. For the first time in history, it is now possible to synthesize fats from non-biological and even from inorganic materials. Although the direct use of synthetic fats as human food cannot be recommended from a safety standpoint because of their toxic effect, the development of this new industry could, even now, contribute to world food supplies, especially by substituting synthetic fats for natural fats now being used for non-food purposes.

English and French editions available at FAO sales agents throughout the world at 25 cents (U.S.) a copy.

Studies of grain drying methods

As a stimulus to the spread of information on protection of stored grain from fungus and insect attack, FAO has published studies of methods used in Canada, the United States, and the United Kingdom in drying grain before storage.

At an international meeting on infestation of foodstuffs held in London in the latter part of 1947, great stress was laid on the conditioning and storage of grain as one of the most important factors in preventing losses from fungi and insects. As an outgrowth of the discussions, FAO was asked to make a critical review of the methods of grain drying and storage in use in all parts of the world.

The papers published under the title 'Storing and Drying Grain in Canada, in the United States, in the United Kingdom' are the first in a scheduled series. Some time will be required to complete the series, since investigation by personal inspection is considered to be the only satisfactory means of getting adequate information. The papers on Canadian and United States practice were prepared by L.E. Kirk and L. Ling of FAO, and the one on United Kingdom practice by T.A. Oxley of the U.K.'s Department of Scientific and Industrial Research, assisted by W.F. Williamson of the National Institute of Agricultural Engineering.

Canada enjoys a great advantage in storing and handling grain. Because of the low temperature, throughout most of the year, grain can be stored safely for long periods. Storage problems, however, have received a great deal of attention, since Canada normally has large carried-over stocks of grain on farms, and in country and terminal elevators. As, in the United States average temperatures are higher, and in many sections, humidity too is higher, there is much greater danger than in Canada from infestation by insects, and the moisture content of grain must be lower for safe storage in the warmer areas. Problems of grain drying and storage in the U.S. are greater, also, on account of the diversity of crops grown.

The problem of the United Kingdom, a large grain importer, is two-fold. The handling and storage of imported grain presents quite different problems than those involved in storing a home-grown crop. If the imported grain arrives unspoiled, as most of it does, it can be kept for several months without special treatment. Here, however, insect pests present a very serious problem. The home-grown crop, on the other hand, is seldom in suitable condition for storage beyond a few weeks unless special treatment (normally drying) is applied.

The studies describe in detail types of drying equipment used in the three countries to force heated air through the grain. Information is given on government regulations on the allowable moisture content of stored grains. Extensive use of the combine harvester in Canada and the U.S., though it effects great savings in labour, has created new storage problems, since harvesting by combine ordinarily leaves no time for the grain to dry out between cutting and threshing.

Although the studies describe existing methods of handling, drying, and storing grain, they are not intended to provide information on the materials, construction, mechanics, and cost of operating the equipment. Operational details of this sort will be made available by FAO on request, however, as a service to its member countries.

The application of science to the handling of cereal crops and the practices described in the studies are as yet far from ideal and still in the development stage. Nevertheless, they are expected to help in cutting down grain losses, which, even in 1947, were estimated at 33 million tons.

The bulletin containing the three studies is published in English, with a Spanish edition in preparation. It is on sale at FAO sales agencies throughout the world at fifty cents.

Timber statistics and report on lumber market published

Timber imports, in 1947 far below pre-war levels, showed an increase in most European countries. However, now that many countries have covered their immediate vital reconstruction needs for timber, and at the same time must budget their currency stringently — actual imports remained below the effective demand and even, in some cases, buying limits agreed upon in June 1948 in the Timber Committee meeting of ECE were not reached.

The most noteworthy change in the Timber market has been the considerable decrease in imports from dollar countries, U.S.A. and Canada.

According to an analysis of the European lumber market contained in the latest issue of the 'Quarterly Bulletin of Timber Statistics' (Vol. 1, No. 3), published jointly by FAO and the Economic Commission for Europe, measures to combat inflation, including in some countries a reduction in investment and in new credits granted, had a strong influence on the demand for timber.

The statistical section of this latest issue of the English-French 'Quarterly Bulletin' shows that France had the largest increase in sawn softwood production during the first nine months of 1948, compared to its production during the first nine months of 1947. Its lumber output rose from 317,800 standards to 454,900 standards, an increase of 43%. Among the countries reporting, Poland showed the next highest production increase, having raised its output 27% from 292,300 standards to 372,300 standards. As no comparable production figures of some main producing countries, as Finland, U.S.S.R. and Yugoslavia, were available, no comments can be made.

The new issue of the 'Quarterly Bulletin of Timber Statistics' gives latest figures on timber production and stocks as well as timber exports and imports of most of the countries of Europe. Data for the period January-September 1948 are compared with figures for the same period 1947. The information covers sawn softwood hardwood, pitprops, plywood, building boards, roundwood, fuelwood, pulp and pulp products.

The Bulletin includes a 36-page 'Report on the European Sawn Softwood Market', which interprets the timber figures country by country, analyses the market trends and, where possible, forecasts likely development on the European timber market. These market reports, here published for the first time, are planned as a permanent feature of the FAO/ECE publication.

'*Unasylva*', bulletin of the FAO Division of Forestry and Forest Products, published Nos. 4 (July-August 1948), 5 (September-October 1948) and 6 (November-December 1948).

Volume III, No. 1, January-February 1949 of *Unasylva*, the Bulletin of FAO Division of Forestry and Forestry Products, contains an article on 'Chestnut Blight in Asia and North America' by G. Flippo Gravatt and a second one on the same subject in Europe, written by Aldo Pavari *, as well as an article on the 'Indian Forest Service' by R.C. Milward. The second part of the Revue, dedicated to 'Commodity Reports' contains Softwood Lumber Notes, and the third part, 'Work of FAO', is dedicated to the Fourth Session of the FAO Conference and the 1948 Yearbook of Forest Products Statistics.

The second *Yearbook of Forest Products Statistics* for 1948 has been published in a bilingual edition, 212 pp., with Spanish supplement (Price: \$ 2.50) in accordance with FAO's statistical program for forest products. It contains information for the years 1946 and 1947, obtained from 95 countries and territories in response to a questionnaire distributed in 1948 to both member and non-member governments.

FAO published in English, French and Spanish its 'Catalogue of Publications' in December 1948 which will be of particular interest to those who

* Director of the Forestry Research Station in Florence. See January-March 1949 number of our Bulletin for abstract of his speech given at the opening Session of the Sub-Commission for Mediterranean problems of the European Forestry - Forest Products Commission - Rome - December 1948.

desire to order any book or periodical of FAO. Requests may be sent to FAO Documents Sales Service, Food and Agriculture Organization, 1201 Connecticut Avenue N.W., Washington 6, D.C.

'Program for the 1950 World Census of Agriculture' is the title of a FAO 96-page publication which replaces the preliminary document issued by FAO early in 1947. (Price 1 U.S. dollar).

No. 1-2 for January-February, No. 3 for March and No. 4 for April 1949 of FAO's *Monthly Bulletin of Food and Agricultural Statistics* have been published in the three languages English, French and Spanish.

No. 5 of the FAO Fisheries Bulletin was issued in December 1948.

The FAO Agricultural Study '*L'Elevage en milieux défavorables*', translated from the original English edition — Breeding livestock adapted to unfavourable conditions — published in 1948 (see this Bulletin, No. 5, April-May 1948), has just come out. This work, which forms part of the series of FAO Agricultural Studies, is on sale at 1.50 dollars. It can be procured from the 'FAO Documents Sales Service, Food and Agriculture Organization, 1201 Connecticut Av., Washington 6, D. C. (U.S.A.)' or from the agents for FAO publications in Europe who are listed on page 4 of the cover of this Bulletin.

The French edition of 'Soil Conservation' (FAO Agricultural Studies No. 4) came out in December 1948 (price: \$ 2). Attention was called to this study for the first time in the No. 5 issue of our Bulletin.

A small book on '*Rinderpest vaccines*' published by FAO in March 1949 — is designed as a practical handbook for workers in veterinary laboratories. It gives detailed information on the latest vaccines and includes reports from researchers in China, Egypt, Gambia, India, Kenya, Nigeria and Siam. The book is published in English with a French edition in preparation and is on sale at FAO sales agencies throughout the world at 1 U.S. dollar.

The booklet 'Using Salty Land', issued by the Food and Agriculture Organization, mentioned for the first time in our Bulletin No. 5, April-May 1948, has now been published in the French edition (*Utilisation des terres salines*). Price 50 cents.

FAO in cooperation with Agricultural Experiment Stations in Europe and the Near East published the *Performance Records of Varieties of Hybrid Maize tested in Europe and the Near East in 1947 and 1948* in a 65-page publication, edited in March 1949 by the Agriculture Division of FAO, 1201 Connecticut Avenue, N.W., Washington 6, D.C.

The recently published 'Report of the FAO Oilseed Mission for Venezuela' contains the recommendations for temporary and long-range solutions with a view to increasing the production of oilseeds crops of the country. The Mission was organized at the request of the Venezuelan Government. The 83-page report is available in English at FAO sales agents at 1 U.S. dollar. Spanish edition in preparation.

FAO Bulletin, edited in Washington in English and French, summarizes recent developments for the information of National FAO Committees and others concerned with the work of FAO. For further information address: Director of Information, Food and Agriculture Organization of the United Nations, 1201 Connecticut Avenue, N. W., Washington 6, D. C., U. S. A.

International Centre for Agricultural Study 'David Lubin'

A celebration in memory of David Lubin, whose photograph we publish in this number, is to take place on 25 July at the offices of the Regional Bureau of FAO in Europe, Rome.

The establishment of a Centre for Agricultural Study in the Library of the former International Institute of Agriculture bearing the name of David Lubin will be discussed from 26-28 July.

The UNESCO, the Italian Government, national agricultural organizations and international government or private organizations concerned with agriculture have been invited by FAO to attend and explore the possibilities of such an Academy, or Centre. The Library, which in Europe is unique in its kind, would lend itself admirably to this purpose. Research work, lectures, conferences, study could all be undertaken here, and in close touch with the Regional Office of FAO which is housed in the adjacent building.

The Library collection comprises mainly publications on all the technical branches of agriculture — for instance, agricultural phytopathology, rural engineering, horticulture, silviculture, etc. — and on all the sciences connected with agriculture — botany, zoology, chemistry, geology, mineralogy, meteorology, etc. There is also a large collection of books on the economic sciences, for example, on all the branches of political economy — finance, credit, cooperation, insurance, etc. — and, in particular, on every aspect of agrarian economy. Legislation, law and the social sciences are also extensively represented. There is a remarkable collection of legislative texts from all countries and from periodicals — about 5,000 reviews and newspapers. A complete Library Catalogue of about 3,000 pages has been published this year in French and English, and, although there have been no new acquisitions since May 1943, the Library's books now number 365,121.

F I L M E X C H A N G E

The United Nations Film Board

We wish to inform our readers that the United Nations Film Board, composed of representatives of the United Nations and the Specialized Agencies, was set up to coordinate the stimulation, production, and distribution of films and visual material and to establish joint services in this field for its members. As a member of the UN Film Board, FAO seeks to promote the use of films and other visual media in the Organization's field of activity.

Switzerland

The Swiss National Committee gives notice that it is prepared to lend the following three films, produced by the Federal Veterinary Office, Läng-

gasstrasse 8, Berne, monochrome, 16 mm., talking, French:

Bovine tuberculosis (length 236 m.).

The prophylaxis of foot-and mouth disease (length 178 m.).

The warble-fly and its prophylaxis in Switzerland (length 174 m.).

The Veterinary Office is always willing to cede negatives at cost for the recording of further copies.

The Swiss National FAO Committee states that next summer another two films will be available, one on the utilization of fruits, the other (silent, 16 mm., text in German and French) on cattle-breeding (red-spotted and brown-spotted breeds). Editions with text in French only, in French and Italian, in English and Spanish, of the latter film will also come out later.

Battle for Bread

Some of the forces being deployed to help the farmers to win the battle for existence are pictured in the new United Nations documentary film 'Battle for Bread' produced in 1948 by the March of Time USA for the United Nations Films and Visual Information Division of the UN Department of Public Information. The film has been sponsored by the United Nations Film Board. Length 23 min. black and white, size 16 mm & 35 mm. Narration English. The film shows the technical assistance given by FAO to improve agricultural production in several member countries (Italy, Poland, India, China). In particular, the introduction of hybrid corn into Europe is illustrated, as well as work done on animal health infestation control, reafforestation and soil conservation. Information about theatrical and non-theatrical distribution, and the preparation of other language versions is available through the United Nations Department of Public Information, Lake Success, New York, N. Y. National FAO Committees desiring to purchase or borrow this film should write direct to FAO Information Division Washington.

Colorado Beetle Film

The International Committee on Colorado Beetle Control has produced a talking film on the Colorado beetle. It is available both in 35mm (black and white) and 16mm (colour) and will be shortly be available in English, French and Dutch. The Committee will give one copy free of charge to each interested country of each size, further copies can be obtained from Dr R. Poutiers, 14 rue Cardina Mercier, Paris 1X for the price of £ 9 (35mm) and £ 20 (16mm).



Noting that inadequate nutrition was responsible on a very large scale for poor health among children and for low productivity of millions of workers, the Board also approved a nutrition program to be carried out in 1950 in collaboration with FAO. WHO's activities would include collection and distribution of information on recent advances in nutrition, mass education programs for the improvement of food habits, advice to mothers on nutrition, and sending of consultants to individual countries. Nutrition specialists would work closely with malaria control and other teams.

World health services development

A comprehensive program for strengthening public health service in all countries was approved by the Executive Board of WHO on 3 March 1949. Other projects discussed and adopted for execution in 1950 included work in the field of nutrition, typhus and plague control, and extension of research on BCG vaccination.

The programme in Public Health Administration, as adopted by the Board for submission to the second Health Assembly next June, includes: (1) collection and dissemination of information; (2) field surveys of local public health conditions; (3) expert advice on various problems such as construction and management of hospitals, medical rehabilitation, health centres, nursing, industrial hygiene; (4) direct assistance to governments through demonstration teams and expert consultants; and, (5) international exchange of public health personnel.

WHO radio health bulletins

The World Health Organization transmits two daily radio-telegraph broadcasts of epidemiological information in French, from Geneva.

Acknowledgement of the daily health bulletins broadcast in English as well as in French over 10 transmitters of the Geneva-Prangins radio station has come from the health administrations of 15 countries in all continents; the messages are also widely picked up by radio amateurs and ships at sea. WHO has received from them detailed reports of reception conditions. These daily radio-telegraphic bulletins in morse contain information on incidence of plague, cholera, yellow fever, smallpox and typhus in maritime and airports and on vaccination and quarantine measures imposed or withdrawn. They also include information on epi-

demic outbreaks of other diseases of international importance (*e.g.* influenza).

The service began last January on an experimental basis. It extends to the whole world a system which has been functioning successfully since 1925 in the Far East through the Singapore Epidemiological Intelligence Station.

The broadcast will be transmitted daily at 9.20 GMT over 44.97 metre wavelength.

Infantile mortality rate shows marked recession

Infantile mortality has decreased considerably since 1937, according to the Monthly Bulletin of Statistics published by the Statistical Office of the United Nations.

Infantile welfare conditions are at their best in New Zealand, Sweden, Australia, the United States, the Netherlands, Switzerland, Denmark, the United Kingdom and Canada. These are the countries with the lowest infantile mortality rates.

In 1947 the lowest rate of all (25 per 1,000) was recorded by New Zealand and Sweden. Australia followed with 29 per 1,000. The United States, the Netherlands and Switzerland all had infantile mortality rates of less than 40 per 1,000. The rate for Denmark, the United Kingdom and Canada was 45 per 1,000 or less.

Food and people

UNESCO is planning an extensive public information programme on the FOOD AND PEOPLE theme. Papers on various aspects of the food and population problem in cooperation with FAO, the United Nations' Population Division, and the World Health Organization will be available in printed form in English, French and Spanish for the autumn discussion season 1949-50. Travelling Photo-Exhibit Boxes, Film Lists, Recordings, Wall Charts and Cartoon Booklets are being prepared as additional material. In principle the National Commissions will be responsible for initiating these discussion programmes; World Federation of United Nations Associations (WFUNA) has agreed to make FOOD AND PEOPLE one of its major projects for 1949.

Preliminary arrangements for the WFUNA Summer School in Geneva in August and the WFUNA Plenary Assembly in Rome in September 1949 are being made; it is intended to give particular attention to the UNESCO Discussion subject FOOD AND PEOPLE at these occasions.

CONFERENCES

CONGRESSES

MEETINGS

Inaugural meeting of the International Rice Commission

The International Rice Commission, whose creation was recommended by the Baguio Rice Meeting in March 1948 and approved by the Fourth Annual Conference of FAO in November 1948, completed, after two weeks, its inaugural meeting which was opened by Mr N.E. Dodd on 7 March 1949 in Bangkok, Siam.

The three phases of the work of the Commission (*i.e.* production, distribution and utilization; statistics; and terminology) were discussed by three committees simultaneously, and a number of problems was dealt with.

Of the seventeen countries which had accepted the constitution of the Commission, eleven (Burma, Ceylon, France, India, Italy, Netherlands, Paraguay, the Philippines, Siam, the United Kingdom and the United States of America), sent representatives. Observers were present from Australia, China, the UN Commission for Asia and the Far East, UNESCO, and the Supreme Command for the Allied Powers in Japan. Those unable to send representatives were Cuba, Dominican Republic, Ecuador, Egypt, Mexico and Pakistan.

The Headquarters of the International Rice Commission will be located in Bangkok, the seat of the FAO Regional Office for the Far East. Any FAO member country may join the Commission upon acceptance of the constitution and notification to the Director General.

Conference on grain storage in South America

Most Latin American governments and the governments of Canada, France, the Netherlands, the United Kingdom, and the United States were represented at the recent FAO-sponsored conference on problems of grain storage held in Cali, Colombia.

The conference, by resolution, requested, that governments without services to deal with infestation by moulds, insects and rodents establish such services at once; that governments undertake surveys to lay a basis for adequate control work; that each country be responsible for control measures within its own borders; that each country export

only products which are free from infestation and contamination; that FAO make information available to all countries to aid them in their control efforts.

And, that FAO convene another conference so that an organization can be set up with its own offices and with at least one delegate from each country meeting annually to discuss advances made in each country in control work. It was suggested that action along this line might be taken at the Fifth Annual FAO Conference to be held in Havana, Cuba, next November.

Organization of Agricultural Extension or Advisory Work

For the meeting on *Organization of Agricultural Extension or Advisory Work* to be held in Belgium and Holland from 1 to 13 August, all European FAO member countries have been invited to send three delegates. Specialists from European countries which are not members of FAO and where extension work is also carried out amongst farm women or children also have been invited. The purpose of the meeting is to provide for an exchange of views and experience on the subject of disseminating information and improvement of practice. The two phases in the development and carrying out of extension or advisory work, firstly the training of advisory workers and secondly the instruction of farmers by these advisory workers will be discussed at the meeting.

Eighth plenary meeting of the International Cotton Advisory Committee

The International Cotton Advisory Committee convened on 25 April 1949 at Brussels for its Eighth Plenary Meeting with a view to examining the current economic position of cotton in the world and the trends of recent and prospective developments.

The International Cotton Advisory Committee (ICAC) is an intergovernmental organization (member governments: Argentina, Australia, Austria, Belgium, Brazil, Canada, China, Colombia, Cuba, Czechoslovakia, Egypt, France, Greece, Indian Union, Italy, Lebanon, Mexico, the Netherlands, Pakistan, Paraguay, Peru, Anglo-Egyptian Sudan, Turkey, United Kingdom, United States, Venezuela) designed to promote world cooperation in the solution of those problems of cotton that are primarily international in character. Its organization is the outcome of an International Cotton Meeting of 12 of the principal cotton exporting countries held in Washington in September 1939.

Fisheries Council

The Indo-Pacific Fisheries Council at Singapore whose first meeting was opened by Mr N.E. Dodd, Director General of FAO on 24 March 1949 is the first of a series of such regional councils which FAO will initiate to encourage governments to work together toward developing the production and more effective use of fisheries products.

IIIrd International Poplar Congress

The IIIrd International Poplar Congress, organized on occasion of the 3rd meeting of the International Poplar Commission, took place in Belgium and in the Netherlands, from 18 to 28 April 1949 at the request of the Ministers of Agriculture and the Chairmen of the FAO National Committees of these countries.

Representatives of Belgium, Italy, France, Luxembourg, Hungary, the Netherlands, United Kingdom, Sweden and Switzerland took part in this Congress. FAO and the International Union of the Forest Research Stations were also represented. The Congress and the International Commission were presided over by Mr Ph. Guinier, Honorary Director of the 'Ecole nationale des Eaux et Forêts', of the French Delegation, while Dr Houtzagers, Professor at the Agricultural Institute of Wageningen, of the Netherlands Delegation, acted as Vice-Chairman.

The Congress included, in addition to the official receptions given by the Belgian and Netherlands Ministers of Agriculture, a research tour and meetings for reports. The tour covered the poplar-growing regions in Belgium and in the Netherlands, specially in the Belgian provinces situated to the north of the Ardennes and in the Dutch provinces in the south and centre. The Congress members visited nurseries, natural stands, industrial plantations, agricultural estates, research institutes, match factories, sabot factories, papermills and sawmills. Reports on poplar diseases and pests, cultivation methods, genetics and wood tests were given at the Brussels Academy and at the Eindhoven Academy in the Netherlands.

The International Poplar Commission proper devoted its sessions to the work carried out in the different countries on genetics, to the final preparation of card indexes for identifications and wood tests, and nomenclature of poplars.

This Congress, which was attended by top officials of forestry administrations and representatives of production, scientific and technical research and industry, was particularly successful owing to the excellent way in which it was organized by the Belgian and Netherlands National Poplar Commis-

sions. It was also, on the international plane, an effective example of the collaboration desired between producers, technicians and consumers, and advocated by FAO.

Forestry conference in Mysore

The first intergovernmental conference on forestry problems common to the countries of Asia and the Far East was opened under auspices of FAO in Mysore, India on 28 March 1949. The conference was attended by delegates from Burma, Ceylon, France, India, Indonesia, Malaya, New Zealand, Pakistan, the Philippines, Portugal, and Siam; observers were present from Nepal, Indonesian Republic, UNESCO and UNO. The central objective of the Mysore conference was to enlist the interest of countries to a point where forest development programs would be given high priority in national planning and management; protection and development of forest resources were major items on the conference agenda.

United Nations scientific conference on the conservation and utilization of resources

Mr Trygve Lie, Secretary General of UN, issued on 11 March 1949 a statement announcing the forthcoming United Nations Scientific Conference on the Conservation and Utilization of Resources (UNSCCUR) to be held at Lake Success from 17 August to 6 September 1949.

The decision to hold such a conference and its terms of reference were formulated by the Economic and Social Council in a resolution taken at its Fourth Session in March 1947, and were subsequently confirmed, after preparatory work by the UN Secretariat, in a resolution of the Council taken at its Sixth Session in February, 1948. In both resolutions the Council stressed the fact that the Conference should not be policy-making, that it should neither reach decisions that would be binding on governments, nor make recommendations to governments. Its task 'is to be limited to the exchange of experience on the techniques of the conservation and utilization of resources'.

The Conference agenda will cover a wide range of subjects on each of which scientists, economists, engineers and technicians from many countries have been invited to submit papers for presentation to the Conference. In addition other experts in the various fields are being invited to attend by the United Nations Secretary General. The Conference will lay emphasis on the practical application of science to resource management and human use rather

than on minute refinements in research and scientific method. In particular, a series of meetings will be devoted to the resource techniques of primary importance to underdeveloped countries.

The Conference will be divided into the following Sections: — Mineral Resources, Fuels and Energy, Water, Forests, Land Resources and Wildlife, Fish and Marine Resources. The Plenary Meetings will review the overall World Resources Situation, their Use and Conservation, Techniques of Special Interest to Less-Developed Countries, the Inter-related Application of Techniques and a Summary and Review of the Conference.

○

The *Population Commission*, set up as the outcome of a Resolution of the Economic and Social Council dated 3 October 1946, held its Fourth Session at Geneva from 11 to 21 April 1949. The Commission expressed gratification that the first issue of the United Nations Demographic Year Book will be published in summer 1949 and urged that in the second issue data on unemployment should be included. The Commission hopes that the studies it has called for (*i. e.*, interrelationships of population, economic and social factors, designed to assist in planning for the social and economic development of the less developed regions of the world, for postwar reconstruction, economic stability, full employment in countries where the level of living is comparatively high) may improve the knowledge of the interrelation of these factors and permit the effective use of that knowledge in raising living standards. The Commission emphasized the need for adequate and internationally comparable tabulations of data from population censuses.

○

The Italian National Agricultural Meeting (Convegno Nazionale dell'Agricoltura) was held in Rome, 11-12 March, 1949. The Meeting recommended an intensification of economic-technical services for farmers and advocated the re-establishment on a voluntary basis of organizations serving the interests of farmers in various branches of agricultural production.

The Meeting was attended by Mr A. Segni, Italian Minister of Agriculture. The European Regional Office of FAO in Rome was represented by two observers, Messrs T. Pasto and J. Marek.

○

Following the wish of several of its member countries, FAO convened a meeting of Government representatives in Paris on 27-29 June 1949 to study

the possibility of the creation of a European Committee on Technological Agricultural Development which will coordinate agricultural activities in Europe and study the most urgent problems, for the furtherance of agricultural development in various countries.



The Eighteenth International Wool Conference was held at Florence, Italy from 30 May to 4 June 1949. The agenda comprised among other items reports on international wool arbitration, wool production, customs terminology and wool statistics. FAO's observer was Mr A. van Houtte, Secretary of the European Office of FAO.

Preparations for the Third Annual Conference of the IAI in Warsaw

According to the resolution of the second conference of agriculturists and sylviculturists of Eastern European countries 12 committees were set up under the auspices of the IAI (Institute for International Collaboration in Agriculture and Forestry in Prague) Committee to deal with the following subjects: plant production, agricultural cooperatives, agricultural chemistry, agricultural planning, agricultural politics and economics, agricultural biology, soil research, livestock, geonomy, mechanization, forestry, fisheries, hydrobiology, and agricultural education.

The recommendations of all these committees will be submitted to the Third Annual Conference of the IAI to be held in Warsaw in July of this year.

(IAI Bulletin, Vol. II, No. 1).

International Youth Week

The Belgian National FAO Committee is busy with preparations for an International Youth Week to be held from 4 to 11 September 1949 at Huyzingen in the province of Brabant in Belgium. Young people from different nations will gather in order to hear about FAO and to see some of the Belgian establishments, such as for instance the 'Quick Freezing' installations in Antwerp, Hoeylaert and its glasshouses, 'les centres de pomologie et d'avertissement contre les insectes déprédateurs' in Gorsem; and others. Lectures will be given by eminent experts and scientists; Lord Boyd Orr, former Director General of FAO, Mr A. H. Boerma, Regional Representative of the Director General of FAO in Europe, Mr P. M. Sinard of the Joint FAO/ECE Committee on Agricultural Problems, Mr F. T. Wahlen, professor

at the Ecole Polytechnique Fédérale (Agriculture) in Zurich and newly appointed head of FAO's Agriculture Division, and Mr Michel Cépède, Secretary of the French National FAO Committee are among those who have promised to attend the meeting. Many organizations have given their help in organizing this International Youth Week: the Boerenbond, the Food Industries, the Nitrogen Industries, the Chambers of Commerce, [and the province of Brabant, which is offering hospitality. The Belgian Association of the United Nations and the Red Cross are also supporting this meeting.

Last year a similar seminar was successfully organized in Touraine (France) by the Belgian and French National FAO Committees (see No. 7/1948, page 607 of this Bulletin).

Mediterranean Health Conference

The WHO Eastern Mediterranean Health Conference concluded its discussions on 14 February 1949. Representatives of nearly twenty countries and territories examined the vast health problems of the Eastern Mediterranean Area and recommended the establishment in Alexandria, Egypt, of the Regional Office of WHO for the Eastern Mediterranean. Sir Aly Tewfik Shousha Pasha, Egyptian Under-Secretary of State for Health was unanimously nominated Regional Director.

The Regional Office is expected to begin its activities on 1 July 1949.

Fifth International Grassland Congress

The Fifth International Grassland Congress scheduled to meet at Noordwijk aan Zee, the Netherlands from 22 to 26 June 1949 was to deal with the following aspects of its programme: Soil Manuring; Genetics, Breeding and Seed; Production of Grasses and Clovers; Grassland Sociology and Ecology; Establishment, Management and Utilization of Grassland; Nutritive Value of Grass and Conservation of Fodder. R. W. Phillips, Acting Director of FAO's Agriculture Division was to deliver the opening report on 'Grassland and the World's Food'.

32nd Session of the International Labour Office

The 32nd Session of the International Labour Office is being held in Geneva. The Session started on 8th June: Mr F. L. McDougall, FAO Counsellor, is representing FAO.

Conferences and congresses

			August	1 to 13	<i>The Hague</i> , Meeting of Specialists on Agricultural Extension, FAO.
June	4 to 7	<i>Palermo</i> , (Italy), International Mediterranean Citrus-growing Congress.		—	<i>Paris</i> , International Conference of Plant Breeders.
	8	<i>Geneva</i> , International Labour Conference, 32nd Session.		8 to 13	<i>London</i> , 14th International Veterinary Congress (Main theme: The contribution of veterinarians to world provisions).
	8 to 11	<i>Geneva</i> , Inland Transport Committee, ECE Working Party for the transport of perishable foodstuffs.		10 to 17	<i>Geneva</i> , WHO - Expert Committee on Malaria
	13	<i>Rome</i> , WHO General Assembly, Second Session.		14 to 15	<i>London</i> , FAO - Meeting of Specialists on Foot-and-Mouth Disease Control.
	13 to 25	<i>Paris</i> , Council of FAO, Sixth Session.		15 to 19	<i>Stockholm</i> , XIIth International Dairy Congress.
	16	<i>Raleigh</i> (North Carolina), Meeting of experts on conservation of soil fertility and agronomy.		17 to 6 Sept.	<i>Lake Success</i> , UN Scientific Conference on Conservation and Utilization of Resources.
	17 to 18	<i>Paris</i> , Conference of the International Union of Agricultural Sciences.		21 to 28	<i>Stresa</i> , Conference of the International Association of Agricultural Economies.
	20 to 24	<i>Bangkok</i> , Conference on Rinderpest Control in South East Asia, FAO		22	<i>Australia</i> , Conference on Plant and Animal Nutrition in Relation to Soil and Climatic Factors.
	22 to 26	<i>Noordwijk aan Zee</i> (Netherlands), Fifth International Grassland Conference.		22 to 27	<i>Stockholm</i> , VIIth International Congress of Home Economics Education.
	27	<i>Geneva</i> , Regional Conference of International Non-Governmental Organizations.		26 to 31	<i>Brussels</i> , FAO - Fourth Meeting of Technical Committee on Wood Chemistry.
	29	<i>Milan</i> , IIInd World Congress of the International Trade Unions Federation.	August	or September	<i>Geneva</i> , ILO - Permanent Agricultural Committee, Third Session.
July	10 to 20	<i>Helsinki</i> , Third World Forestry Congress.	August	(?)	<i>Athens</i> , VIth International Vine and Wine Congress.
	11	<i>Paris</i> , Committee of the International Wine Office.	August	or September	<i>United Kingdom, Denmark or Switzerland</i> , Meeting of Experts on Dairy Products and Marketing.
	18 to 19 (proposed)	<i>Geneva</i> , Committee on ECE/FAO joint agricultural problems.			<i>Geneva</i> , IIIInd Session of Permanent Agricultural Committee.
	18 to 23	<i>Geneva</i> , ILO-Preliminary Meeting of Representatives of Governments and Specialized Agencies on Migration.			
	21 to 28	<i>London</i> , IIInd International Congress for Crop Protection. (6 Sections) (meetings and visits).			

August	25 to 15 Sept.	<i>Geneva</i> , UN Interim Commission on International Organization of Trade. Executive Committee.	November 22 to 24	<i>Geneva</i> , Working Party (according to the decisions taken at the September meeting)	of ECE ad hoc Committee for Trade and Industry Development.
September	4	<i>Berne</i> , International Statistical Institute, 26th Session.	December	4 and 5	<i>Rome</i> , National Council of Agricultural Experts and Meeting of National Council of the Agricultural Experts' Association
September	4 to 11	<i>Huyzingen</i> , International Youth Week, Belgian Nat. FAO Committee.	Fairs and exhibitions		
	8 to 11	<i>Geneva</i> , ad hoc Committee on Agricultural Problems (ECE)			
	13 to 15	<i>Geneva</i> , ECE Timber Committee (Closing Meeting of Session 3).			
	20	<i>Lake Success</i> , UN General Assembly. Fourth Session.			
	22 to 25	<i>Milan</i> , 1st International Transport Congress and IIIrd National Transport Congress.			
	—	<i>Paris</i> , UNESCO General Conference, Fourth Session.			
	—	<i>Central America</i> , Conference on Locust Control.			
	29 to 1 Oct.	<i>Innsbruck</i> , General Assembly of European Confederation of Agriculture			
October	1 and 2	<i>Geneva</i> , ad hoc Committee on Agricultural Problems (ECE)			
	3 to 14	<i>Cairo</i> , Conference on Livestock breeding in the tropics and sub-tropics.			
	23 to 30	<i>Barcelona</i> , XXIIInd International Congress of Industrial Chemistry. (Organized by the Society of Chemical Industries, Paris and by the Spanish Chemical Industries).	June	18 to 3 July	<i>Lille</i> , International Fair.
	28 to 30 (if requested)	<i>Geneva</i> , Meeting of Working Party of ad hoc Committee on Agricultural Problems.		19 to 4 July	<i>Bordeaux</i> , 28th Colonial and International Fair.
November	1 to 3	<i>Geneva</i> , ECE Sub-Committee for Chemical Fertilizers		26 to 10 July	<i>Casablanca</i> , Fair.
	17 to 19	<i>Geneva</i> , Working Party of ad hoc Committee on Agricultural Machinery Problems.	July	5 to 8	<i>Shrewsbury</i> , Royal Agricultural Exhibition.
				27 to 5 Aug.	<i>London</i> , Garden Show.
			August	20 to 20 Sept.	<i>Izmir</i> , Fair.
				23 to 12 Sept.	<i>Plovdiv</i> (Poland).
				25 to 5 Sept.	<i>Stockholm</i> , International Fair of St. Erik.
			September	2 to 13	<i>Budapest</i> , International Fair.
				3 to 19	<i>Strasbourg</i> , Fair.
				4 to 21	<i>Bari</i> , International Fair of the Levant.
				7 to 14	<i>Vienna</i> , International Fair.
				8 to 19	<i>Parma</i> (Italy), IVth International Preserved Food Fair.
				10 to 20	<i>Marseille</i> , International Fair.
				10 to 25	<i>Lausanne</i> , International Fair.
				10 to 25	<i>Ghent</i> , International Fair.
				17 to 2 Oct.	<i>Brussels</i> , Fair of Flanders (Stand of the Board of Trade).
				24 to 3 Oct.	<i>Aurillac</i> , Commercial, Agricultural, Industrial, Handicrafts Fair.
				24 to 9 Oct.	<i>Lyons</i> , 1st International Exhibition of Rural Housing.
			October	1 to 16	<i>Brussels</i> , Food Show.
				5 to 16	<i>Geneva</i> , Fair.
				6 to 16	<i>Paris</i> , International Show of Packing and Bottling and Related Industries.
				7 to 17	<i>Toulouse</i> , The Friends of Housewifery Arts.
				13 to 23	<i>Saint-Gall</i> , Olma.
				—	<i>Lugano</i> , Swiss Fair.



Documentation on agricultural and nutrition questions in Switzerland

Agenda de l'industrie laitière et de l'agriculture pour 1948. 36e année. Lausanne, J. Bron, 1948.

Aubert F. Gut, R.-Ch. Notre forêt. Eléments d'économie forestière. Publ. par l'Association suisse des professeurs d'agriculture et des ingénieurs agronomes. Lausanne, Payot, 1948.

Brugger, H. Die landwirtschaftlichen Bürgschaftsorganisationen in der Schweiz im Jahre 1946. Le organisations suisses de cautionnement en 1946. Brugg, Schweiz. Bauernsekretariat, 1948.

Däniker A.U. Ueber die Bedeutung des Schweizerwaldes. Eine Aufklärungsschrift. Red. A.U.D. Basel, Schweizerischer Bund für Naturschutz, 1945.

Die Verschleisspanne im Nahrungsmittelverkehr der Schweiz..: (Die Nahrungsmittelproduktion der Schweiz. Landwirtschaft, 1934-36, 1938 und 1943-45. H. Brugger. Die Verschleisspanne im Nahrungsmittelverkehr der Schweiz. J. Petričević. Das neue Agrarprogramm and seine Auswirkungen. 3 Abhandlungen, Brugg, Schweiz. Bauernsekretariat, 1948.

Frey, O.G., Spreng, F., Kernobst-Atlas. Die wichtigsten Sorten und Schädlinge. Olten, O. Walter AG., 1948.

Marbach, W. Bodenkunde. Leitfaden für den Unterricht an landwirtschaftlichen Schulen und Lehrbuch für den praktischen Landwirt, Förster und Gärtner. 3. Aufl. Hrg. vom Schweiz. Verband der Lehrer an landw. Schulen und der Ingenieur-Agronomen. Aarau, Wirz & Cie., 1948.

Mitteilungen der schweizerischen Anstalt für das forstliche Versuchswesen. Annales de l'institut fédéral de recherches forestières. Hrg. von H. Burger. Bd. 25, H.1. Zürich, Komm. Beer & Cie. 1947.

Neukomm W. Untersuchung über die Anwendbarkeit der Rohertragsmethode bei der Ertragswertschätzung landwirtschaftlicher Kleinbetriebe, unter Berücksichtigung ihrer besonderen soziologischen und ökonomischen Verhältnisse. Diss. techn. Wiss. ETH Zürich 1947.

Schweizerisches Bauernsekretariat, Die Uebernahme eines landwirtschaftlichen Betriebes. Wegleitung bei Kauf oder Pacht. Brugg, Schweiz. Bauernsekretariat, 1948.

Schweizerisches Bauernsekretariat, Rentabilität in der Landwirtschaft im Erntejahr 1945/1946 (1. März 1945 bis 28. Febr. 1946) Teil 1 Bericht an das Eidg. Volkswirtschaftsdepartement. Secrétariat des paysans suisses. Recherches sur la rentabilité de l'agriculture suisse pendant l'exercice 1945/1946. Ire partie. Rapport au Département fédéral de l'économie publique. Brugg, Schweizerisches Bauernsekretariat, 1947.

Schweizerische Forststatistik 1946. Lfg. 12, 2. Bearb. von der Eidg. Inspektion für Forstwesen, Jagd und Fischerei. Statistique forestière suisse 1946. Livr. 12, 2. Elaboré par l'Inspection fédérale des forêts, chasse et pêche. Bern, Eidg. Statistisches Amt, 1948.

Verband schweizerischer Baumschulbesitzer. Ratsschlüsse über das Pflanzen von Obstbäumen und Beerensträuchern. Was kann ich pflanzen? Wann soll ich pflanzen? Wie muss ich pflanzen? Bearbeitung: Verband schweiz. Baumschulbesitzer; Verband schweiz. Gärtnermeister. (Münsingen, H.P. Daepf. Sekretariat des VSB) 1947.

Weibel E. Gärtnerische Düngerlehre. Wegleitung für Gärtner und Gartenbesitzer sowie für den Unterricht. Bern, Verbandsdruckerei AG. 1948.

Zürich Kanton, Landwirtschaftsamt. Der Zürcher Bauer einst und jetzt. Hrg. bei Anlass der Kantonalen Landwirtschafts- und Gewerbe-Ausstellung in Zürich 1947. (Redaktionskommission: J. Manz, E. Rauch, J. Vontobel). Zürich, Landwirtschaftsamt des Kantons Zürich 1947.

Zürich Kanton, Meliorations- und Vermessungsamt. 50 Jahre kulturtechnischer Dienst im Kanton Zürich, 1898-1948. Zürich 1948.

O

The Austrian National FAO Committee has published recently the first number of its bulletin under the title 'Mitteilungen des Oesterreichischen FAO-Komitees' (1948/49, Year 1, No 1). This 16-page publication printed in German, contains an introductory note, an outline of FAO's origins and organization of activities and information on FAO's publications. The Editor-in-Chief is Dr Rudolf Philipp, Chairman of the Committee.

LEGISLATIVE NEWS

SUMMARY : I. UNITED NATIONS ORGANIZATION (Belgium). — II. NUTRITION : (a) Preserved foods (France) ; (b) Preserved and semi-preserved fish (France) ; (c) Preserved meats (France) ; (d) Bread and flours for bread (France, Portugal) ; (e) Stocks of edible oils and fats (Switzerland) ; (f) Stocks of rice, oats and maize (Switzerland). — III. AGRICULTURE : (a) Economic plans and production campaigns (Portugal, Rumania, Switzerland) ; (b) Catalogue of new varieties of cultivated plants (France) ; (c) Crop subsidies (France) ; (d) Agricultural machinery (France) ; (e) Stocking (France, Italy, Luxembourg) ; (f) Viticulture and viniculture (France, Rumania) ; (g) Phytosanitary control (Belgium, France, Italy, Portugal) ; (h) Farm contracts (France) ; (i) Agricultural credit (Belgium, France) ; (j) Fiscal reform (France) ; (k) Stockbreeding (Belgium, France) ; (l) Livestock sanitary police regulations (Belgium, France, Luxembourg) ; (m) Sericulture (Italy). — IV. ECONOMIC AFFAIRS AND MARKETS : (a) European economic cooperation (Luxembourg, Portugal, Switzerland) ; (b) Commercial treaties, economic agreements, tariff conventions, etc. (Luxembourg, Switzerland) ; (c) Foreign trade (France, Italy, Luxembourg, Portugal, Switzerland) ; (d) Concentrated feedingstuffs and potatoes (Switzerland) ; (e) Packing and conditioning of exported fruits and vegetables (France) ; (f) National grade marks (France) ; (g) Price control and fixing : (i) general provisions (France) ; (ii) feedingstuffs (Belgium, France) ; (iii) slaughter animals and meat (France) ; (iv) wheat and flour, bran and middlings (Belgium, France) ; (v) edible oils (Belgium, France) ; (vi) milk and dairy products (France) ; (vii) roasted barley, maize, fecula, etc. (Belgium) ; (viii) potatoes and seed-rice (Portugal) ; (ix) lard (Belgium). — V. STATISTICS (Belgium, France, Luxembourg). — VI. FORESTRY (Belgium, France). — VII. GAME (France). — VIII. FISHERY : (a) International conventions (France, Italy, Switzerland) ; (b) General regulations (Belgium, France, Portugal, Rumania) ; (c) River fishery (France, Luxembourg). — IX. RURAL WELFARE : (a) Social security (France) ; (b) Cooperation (Belgium) ; (c) Rural electrification (France).

I. UNITED NATIONS ORGANIZATION

BELGIUM

The Law of 1 September 1949 (*M. B.*, No. 24-25, 24-25 January 1949, p. 484) ratifies the Constitution of the Food and Agriculture Organization of the United Nations, signed in Quebec on 16 October 1945.

II. NUTRITION

(a) Preserved foods.

FRANCE

A Decree of 26 January 1949 (*J. O.*, No. 97, 23 April 1949, p. 4051) establishes the rules governing the labelling of preserved vegetables and fruits and cooked foods manufactured or kept for sale. All these said preserved foods, whatever the manner of preservation, size and form, and type of processing, must show on the label : (1) either the name or trade name of the original seller, followed by his address, or the registered trade mark and address ; (2) the generic appellation of the product as established by the regulations and rules in force, or failing these, by honest trade practices ; (3) the qualitative composition of the product ; (4) the net weight or contents ; (5) the conventional letter

corresponding to year of production. This letter should be stamped indelibly on the container. The letter P will indicate the year 1949.

The Decree of 6 May 1947 relative to the conditions governing the labelling and marking of preserved food containers is abrogated. Preserved milk products remain under the specific dispositions applied thereto.

(b) Preserved and semi-preserved fish.

FRANCE

A Decree of 10 February 1949 (*J. O.*, No. 40, 15 February 1949, p. 1684) lays down the conditions governing the delivery of special release permits for preserved fish. To obtain this permit the importer must undertake to direct the unblocked preserved fish to the consignees indicated by the Food Supplies Administration, and pay into the 'Caisse de péréquation des produits alimentaires' (Equalization Fund for food products) the dues anticipated by the decrees fixing the price of preserved fish.

An Order of 24 March 1949 (*J. O.*, No. 76, 28-29 March 1949, p. 3282) authorizes the manufacture of preserved products and cooked dishes prepared from the following fish and marine animals only : 'allache', anchovy, eels, 'civelle', anglerfish, horse

mackerel, conger-eels, scallops, crabs, and spider-crabs, dory, grey gurnard, red gurnard, herrings, oysters, crayfish, Norway lobster, ling, whiting, hake, mussels, umbrine, pilchards, cuttlefish and squid, sprats, white tunny, red tunny, sting-fish.

The preparation of semi-preserved products of the following fish or marine animals only is authorized: herrings, mackerel, anchovies, pilchards, sprats and 'civelle'.

(c) Preserved meats.

FRANCE

An Order of 21 March 1949 (*J. O.*, No. 79, 1 April 1949, p. 3379) authorizes the canning of preserved beef, veal, mutton or pork in hermetically sealed containers, notwithstanding the interdiction set forth in the act called Law of 30 November 1940 prohibiting the preparation of certain categories of preserved foods.

(d) Bread and flours for bread.

FRANCE

The provisions of Order of 26 January 1949 (*J. O.*, No. 24, 28 January 1949, p. 1035) substitute Articles 1, 5 and 6 of the Order dated 1 October 1948 relative to the extraction rates and compulsory qualities of different flours. The extraction rate of flours for breadmaking is fixed, from 1 February 1949, at 7 points above the specific weight for wheat flours and 2 points above the specific weight for rye flour. In addition, wheat and rye flours should satisfy the following standards: wheat flours, ash percentage between 0.8 and 1.10 per cent.; the admixture percentage and the screening of the whole flour through a 40 sieve with 0.52 mm. mesh should not leave any residue, and the screening of the whole flour through a 7 reinforced wire gauze sieve with a 0.2 mm. mesh, should give a minimum extraction rate of 80 per cent. Rye flour: ash percentage should be between 0.7 and 1 per cent.; admixture percentage, and screening of whole flour through a 7 sieve should give a minimum extraction rate of 85 per cent., and screening of whole flour through a 40 sieve should not leave any residue.

The same Order also indicates the standards with which special flour should comply.

Order of 5 February 1949 (*J. O.*, No. 32, 6 February 1949, p. 1338) prohibits the preparation, sale or offering for sale bakery wares other than the following: (a) plain bread, minimum weight 2 kg., (b) fancy bread, 700 and 300 grams; (c) French and crescent rolls for which the minimum weight and price are fixed by prefectural order.

The baking and sale of 'pains farinés' and rebaked bread ('pain biscotté') and the sale of bread for making rusks are prohibited.

Plain bread, either in whole loaves or pieces, can only be sold by weight.

PORTUGAL

Decree No. 37:338 of 17 March 1949 (*D. d. G.*, 1st Series, No. 54, 17 March 1949, p. 167) authorizes the use of malt extracts in bread-making. The quantity of malt allowed in the baking of ordinary bread should not exceed the equivalent of 1.3 per cent. reducing sugars expressed in maltose, taking into account the flour employed. The Decree considers as malt extracts the products obtained from cereals previously germinated, no use being made of chemical agents. The extracts should contain at least 62 per cent. of reducing sugars expressed in maltose and have a diastasic action not less than 90° Lintner.

(e) Stocks of edible oils and fats.

SWITZERLAND

With a view to ensuring the provisioning of the country in essential commodities, an Order of the Federal Council, dated 29 April 1949 (*R. L. F.*, No. 18, 29 April 1949, p. 409) decrees further measures relative to the establishment of stocks of edible oils and fats, and also of raw materials and semi-processed products used in their manufacture, in substitution of the dispositions given in Order of 31 March 1939 now abrogated.

Beginning 1 May 1949, the Swiss Grain and Feedingstuffs Cooperative Society is required to undertake contracts for the sale of edible oils and fats, and the raw materials and semi-processed products used in their manufacture (oilseeds, crude coconut oil, etc.) before being imported, only with firms which have agreed to establish at specific centres of the country a permanent stock of these foodstuffs, in the proportion of one third of the quantity imported annually.

(f) Stocks of rice, oats and maize.

SWITZERLAND

An Order of the Federal Council, dated 29 April 1949 (*R. L. F.*, No. 18, 29 April 1949, p. 411), substituting Order of 31 March 1939, carries new provisions for ensuring the establishment of graded rice stocks.

After 1 May 1949 the Swiss Grain and Feedingstuffs Cooperative Society will only conclude agreements for the sale of graded rice and paddy for the preparation of graded rice, before being imported, with the members who will have agreed to set up in the country a standing obligatory stock to the extent, at the option of the firm, of a fourth of its average turnover, for the years 1944 to 1947, or of a fifth of this turnover and the quantities imported in 1948. The firms which have not imported rice previously, will be required to establish an obligatory reserve equivalent to one-third of the imports

anticipated for the first year. From 1 January 1950, however, the compulsory reserve in each case will amount to one third of the quantities imported since the last compulsory stock was fixed.

Another Order of the Federal Council of the same date (*Ibid.*, p. 413) contains provisions aiming at ensuring the setting up of reserves of oats, barley and maize for milling. Beginning 1 May 1949, the Swiss Grain and Feedingstuffs Cooperative Society will only conclude contracts for the sale of the aforesaid products with those members who will be required to set up in the country a permanent reserve stock of at least 10 tons of these cereals, of good commercial value. The reserve is in proportion to the annual quota attributed to each member and should be equivalent to at least a third of this import quota.

III. AGRICULTURE

(a) Economic plans and production campaigns.

PORTUGAL

Decree-Law No. 33:331, dated 12 March 1949 (*D. d. G.*, 1st Series, No. 50, 12 March 1949, p. 160), maintains in force in 1949 the Decree-Laws Nos. 32:340 and 32:438 of 27 October and 24 November 1942 respectively, as it considered that it is still necessary for the corporate and economic coordination bodies to continue to cooperate in the campaign for the production of foodstuffs and agricultural raw materials, in conformity with the plan approved by Order of the Ministry of Economy, Department General of Agricultural Services.

RUMANIA

Law No. 1 of 31 December 1948 (*M. O.*, No. 1, 1 January 1949, p. 1) lays down the general program for the economic production of the country.

In regard to agriculture, measures are envisaged for increase in production with a view to improving the provisioning of the workers so as to assure the necessary raw materials for industry and for setting up State reserves. To attain this goal, measures will be taken to improve the technical standard of agricultural economy, in order to increase the area sown and the average yield per hectare, to augment the productivity of livestock.

Agricultural workers will be taught improved methods of cultivation and the utility of farm machines, as well as more intensive farming methods, by extending the network of the agricultural machinery and tractor stations, reinforcing and enlarging the State farms and fostering agricultural production cooperatives.

In the aggregate, the value of crop production in 1949 is to be 40 per cent. over that of the 1948 season, namely: cereals 14.5 per cent. higher,

vegetables and pulses 74 per cent., and industrial crops, 112 per cent.

In animal husbandry, horse stocks should increase 8.9 per cent., cattle 17.6 per cent., pigs and poultry 100 per cent. In all, animal production should be at least 18 per cent. higher than in 1948.

In order to facilitate higher production, provisions of the Law envisage the development of agricultural scientific institutes whose activity will be mainly directed to the study of practical methods for increasing and improving agricultural production. Lastly, measures are established for the better organization of the control of diseases and pests of plants and animals.

In regard to forestry, work will be intensified on re-afforestation, improvement of Alpine pastures, management of deteriorated soils, and the planting of forest species to the benefit of agriculture. The Forest Research Institute (*Institutul de Cercetari Forestiere*) will develop its activity, from the practical aspect, in order to obtain forest increases both in area and in production.

SWITZERLAND

The Order of the Federal Council dated 11 January 1949 (*R. L. F.*, No. 2, 13 January 1949, p. 24) abrogates, effective 15 January 1949, the Federal Council Order of 1 October 1940 on the extension of field cultivation, as well as Ordinance No. 3 of the Federal Department of Public Economy, dated 20 October 1943, bearing provisions relative to the execution of the said Order.

(b) Catalogue of new varieties of cultivated plants.

FRANCE

Order of 21 April 1949 (*J. O.*, No. 102, 29 April 1949, p. 4268) modifies the list of seed maize varieties registered in the catalogue of species and varieties of cultivated plants, established by Decree of 16 April 1932. In indicating a variety of seed maize, it is prohibited to employ an appellation other than that under which it is noted in the catalogue. Consequently, new varieties, imported or otherwise, can only be sold as seed maize after registration in the aforesaid catalogue.

(c) Crop subsidies.

FRANCE

An Order of 18 March 1949 (*H. O.*, No. 72, 24 March 1949, p. 3097) contains dispositions relative to the payment of the balance of the incentive premium for the 1948 wheat and rye season. The balance of this incentive premium, fixed at 1300 francs per hectare according to Order dated 30 August 1948, is paid to the farmers on the basis

of the areas sown and harvested indicated on the crop statements relating to delivery commitments, envisaged by Order of 14 July 1947. The areas to which the balance of the 1300 francs payment applies shall not exceed those for which the payment of 1000 francs was calculated, as provided for by Order of 5 March 1948 (See this *Bulletin*, No. 6, p. 513).

(d) Agricultural machinery.

FRANCE

By Order of 14 February 1949 (*J. O.*, No. 41, 16 February 1949, p. 1732), a special equipment fund has been set up for agricultural tractor repairing shops. French manufacturers of tractors and power-driven cultivators, importers of tractors and power-driven cultivators, are required to pay into the special fund amounts equivalent to 2 per cent. of the selling price of the tractors and power cultivators from 15 October 1946 to 15 January 1948, and 2 per cent. or 1 per cent. after 15 January 1948, depending on the price of the material.

(e) Stocking.

FRANCE

An Order of 14 April 1949 (*J. O.*, No. 97, 23 April 1949, p. 4072) fixes the premium for stocking capacity allocated to grain enterprises for the 1947-48 season, at the rate of 18.20 francs per quintal of stocking capacity. This premium will be paid to stockists having effectively handled a minimum of 100 quintals of grain from 1 August 1947 to 31 March 1948.

ITALY

Law No. 7 of 5 January 1949 (*G. U.*, No. 20, 26 January 1949, p. 234) enjoins that during the crop year 1948-49, the stocking of wheat, maize and paddy will be effected by quota, in conformity with the rules of Legislative Decree No. 888 of September 1947. Exempt from compulsory delivery are the producers who, in the past 1947-48 season, were only required to deliver for stocking a quantity of wheat under five quintals.

LUXEMBOURG

A Ministerial Decree of 25 February 1949 (*M. L.*, No. 9, 8 March 1949, p. 166) contains dispositions relative to the payment of the stocking premium for bread grains, amending article 9 of the Order dated 15 September 1948. When home-grown bread-grains are kept in stock for a period exceeding 45 days in the mills and 30 days at the corn-merchants, the said mills and merchants will be granted a premium of 4.50 francs per 100 kg. per month, calculated from the 46th and 31st day of storage respectively, according to the terms and conditions laid down by the Minister for Economic Affairs.

(f) Viticulture and viniculture.

FRANCE

Decree No. 49-476 of 5 April 1949 (*J. O.*, No. 84, 7 April 1949, p. 3567) establishes the minimum fortification of liqueurs and wine apéritifs, by abrogation of Decree No. 3276 of 5 November 1942, temporarily reducing from five to two degrees alcohol the minimum quota of raw spirits to be employed in mutage or the fortification of musts or the basic wines, in the preparation of liqueurs and wine apéritifs.

RUMANIA

Decision No. 468.529 of the Minister of Finance, dated 8 January 1948 (*M. O.*, No. 7, 10 January 1949, p. 338) grants wine and brandy producers, for family consumption, the following quantities free from tax on turnover: 200 litres wine and 80 litres brandy at 25°.

(g) Phytosanitary control.

BELGIUM

By Order of the Regent, dated 20 December 1949 (*M. B.*, No. 6, 6 January 1949, p. 87), a *Central Committee for the Protection of Plants and Plant Products* has been set up at the Ministry of Agriculture, for the purpose of coordinating the activity of the Phytopathological Commission of the National Committee for Grain and Foodstuffs Protection, and that of the National Committee of Phytopharmacy.

FRANCE

An Order of 7 March 1949 (*J. O.*, No. 64, 14-15 March 1949, p. 2662), supplements list B annexed to Order of 1 August 1946 relative to the control of animal and vegetal pests of crops, adding the following insects: *Scolytus rugulosus* Ratz (fruit tree bark beetle) and *Xyleborus dispar* F. (ambrosia beetle).

ITALY

A Ministerial Decree of 20 January 1949 (*G. U.*, No. 39, 17 February 1949, p. 435) renders compulsory, in all the provinces of national territory, the control of the corn borer (*Pyrausta nubilalis*) and the owl moth (*Sesamia cretica*) which attack maize and sorghum. Proprietors and tenants, of any status whatsoever, of land grown to maize or sorghum are required, before 30 April each year, to get rid of all stalks in the maize and sorghum fields by utilizing them as litter, by successively transporting them to the manure ditch, transforming them into artificial manure by means of ammonia, or else employing them as fuel or as fodder, or by

destroying them by any other means capable of ensuring the extermination of the larvae of the said parasites.

Law No. 186 of 5 April 1949 (*G. U.*, No. 108, 11 May 1949, p. 1198) authorizes the expenditure of 10 million lire for the financing of experiments on new methods of controlling the olive fly (*Dacus oleae* R.). DDT and Gammexane products will be employed in the experiments.

Law No. 187 of 5 April 1949 (*G. U.*, No. 108, 11 May 1949, p. 1198) authorizes the expenditure of 200 million lire to finance the control of the Argentine ant (*Iridomyrmex humilis*) and the expenditure of 6 million lire to ensure the normal working of the phytopathological services. The cost of protecting from damage private houses, shops, warehouses and hotels will be undertaken by the parties concerned.

PORTUGAL

Decree No. 12:729 of 3 February 1949 (*D. d. G.*, 1st Series, No. 21, 3 February 1949, p. 64) recognizes the official inspection services for potatoes and seed potato selection of Sweden, according to Art. 4 of Decree Law No. 36:665 of 10 December 1947.

(h) Farm contracts.

FRANCE

Law No. 40-2010 of 31 December 1948 (*J. O.*, No. 3, 3 and 4 January 1949, p. 182) modifies Art. 22 of Ordinance dated 17 October 1945, amended by the Law of 13 April 1946, on the statute of tenant farming and métayage, with the object of regulating from 1 January 1949 the mode of calculating farm rent.

In regard to farming leases, the prefect is required to request the Departmental Advisory Rent Board to draw up, for the different regions of the Department, the list of foodstuffs produced locally or regionally (a maximum of four for general crops and four for specialized crops) which will serve exclusively as a basis for calculating the price of leases and the quantity of these foodstuffs representing, according to type and category of crop, the normal rental value of the property leases. In the event of the Board defaulting, two months at the latest after his request for information, the prefect is authorized to make out himself, by Order, the list and quantities of foodstuffs in question as above. These quantities shall not be greater than those representing in 1939 the normal price of leases in the region concerned.

The value of each rent is estimated on the above-indicated bases in a specific quantity of foodstuffs, account eventually being taken of the upkeep expenses incurred by the lessor making improvements in the property, account also being taken of the division of expenses. The price can be paid

either in kind or in cash, or partly in kind and partly in cash. The parties concerned decide the mode of payment when concluding the lease.

In the case of leases by which the entry into possession was fixed at a date subsequent to 1 July 1948, the lessee or the lessor who, at the time of drawing up the lease, agreed to a price higher or lower by one tenth of the normal rental value of the property rented, may in the six months from entry into possession, bring the matter before the joint court which will fix for the future years the normal and fair price of the rent.

(i) Agricultural credit.

BELGIUM

The Law of 26 March 1949 (*M. B.*, No. 114, 24 April 1949, p. 3320) carries measures with a view to augmenting the means of operation of the National Institute of Agricultural Credit. By virtue of this Law, the maximum amount of commitments of the National Institute of Agricultural Credit, fixed at 600 million francs by Royal Decree of 30 September 1937, is brought to 1 milliard francs. Likewise, the amount of the outlay capital, fixed at 150 million francs by the aforesaid Decree of 1937, is raised, by supplementary State subscription, to 175 million francs.

Another Law of 26 March 1949 (*Ibid.*, p. 3321), concerns an increase in the guarantee granted by the State to the same National Institute of Agricultural Credit, with the object of financing the operations of the Commercial Office for Supplies. The amount of the guarantee is raised to 7 milliard francs.

FRANCE

By an Order of 6 January 1949 (*J. O.*, No. 16, 19 January 1949, p. 662), the funds granted for agricultural credit will be allocated in the proportion of 28 per cent. for medium term loans, 39 per cent. for long term individual loans and 33 per cent. for long term collective loans.

Order of 22 April 1949 (*J. O.*, No. 110, 8 May 1949, p. 4503) fixes the maximum rate of interest on short term loans accepted by the Mutual Agricultural Credit Banks in the form of opening a credit in current account. This rate shall not exceed by more than 1 per cent. the maximum rate of interest for short term loans realized by discount of the stock subscribed by the stockholders of the Mutual Agricultural Credit Banks to the order of these institutions.

(j) Fiscal reform.

FRANCE

Decree No. 48-1986 of 9 December 1948 (*J. O.*, No. 1, 1 January 1949, p. 60) revises, in accordance with Art. 5 of the Law dated 17 August 1948 directed toward economic and financial recovery, the fiscal

codes and texts, for the purpose of reducing the number of taxes, dues and duties, of organizing and standardizing their rules of application, simplifying the formalities required of the taxpayers and the tasks devolving on financial administrations, etc.

On and after 1 January 1949, the tax on the profits from the farm is suppressed, as also the rates on property not built upon, and the tax on market-gardening produce levied on behalf of the national agricultural rehabilitation fund, etc. In substitution of these and other taxes are instituted: a tax on the income of persons and a tax on the profits or income of companies and other bodies corporate. The tax on the income of persons also applies to farm profits. The tax is due each year in proportion to the profits or income obtained by the taxpayer or which he disposes of in the course of the year in question. Farm profits are taken to mean the income which the exploitation of agricultural holdings procures for tenants, métayers, share tenants, or the proprietors themselves. These profits include those derived from forest production, even if the proprietors only sell cuttings from standing timber. They also include the return obtained from gallery mushroom beds, beekeeping, poultry-breeding and oyster breeding. The Decree lays down the method of determining the actual profit of the farm and the factors to be considered in calculating the lump agricultural profit. Rules are also adopted in regard to the special conditions applicable to large farms, the classification of the multi-crop farms, the special conditions applicable to forest estates, the declaration of contract and the procedure for estimating the real agricultural profit, etc.

(k) Stockbreeding.

BELGIUM

Ministerial Order of 9 March 1949 (*M. B.*, No. 96, 6 April 1949, p. 2721) amends Art. 8 of the Ministerial Order of 1 February 1946, for the enforcement of the general regulation relative to the improvement of the equine species. The Order establishes the new amounts to be allocated for prizes given at district and regional horse shows, 'primes de conservation' and 'grandes primes de conservation', national prizes for pedigree stallions, prizes for fillies and brood mares of the Belgian draught breed, etc.

FRANCE

An Order of 22 January 1949 (*J. O.*, No. 28, 2 February 1949, p. 1224) establishes an annual premium or prize called 'de sélection' for mares registered in the Studbook for French trotters. This premium amounting to 25,000 francs in 1949, will be attributed, to a limited extent, at special

merit 'concours de modèle', open every year to 4, 5 and 6-year old trotter mares registered in the French trotter Studbook. The 'modèle' premiums will be assigned to mares not yet complying with the conditions required to qualify for a 'prime de sélection'. The premium cannot be cumulated with any other State incentive prize, and will be suspended for all mares remaining unimpregnated for two consecutive years.

(l) Livestock sanitary police regulations.

BELGIUM

By Ministerial Order of 8 February 1949 (*M. B.*, No. 42, 11 February 1949, p. 946), the entry into Belgium, even for transit purposes, of ruminants and pigs originating in the Netherlands or having passed through this country, is prohibited up to 31 March 1949.

The aforesaid Order of 8 February 1949 was revoked, as from 15 March 1949, by Ministerial Order of 11 March 1949 (*M. B.*, Nos. 73-74, 14 and 15 March 1949, p. 1858).

A Decree of the Regent, dated 15 March 1949 (*M. B.*, No. 98, 8 April 1949, p. 2799), amends Art. 34 of the Decree of the Regent dated 15 October 1947, relative to police regulations on foot-and-mouth disease. By virtue of the new provisions, any ruminant or pig affected or suspected of being contaminated with foot-and-mouth disease, found on the public highways, in a public place or on the property of third parties, in infraction of the regulations, is destroyed immediately and without indemnity, by order of the district veterinary inspector.

FRANCE

By Order of 20 December 1948 (*J. O.*, No. 6, 7 January 1949, p. 347) for the enforcement of Decree of 21 August 1948, fowl plague is added to the list of animal diseases considered to be contagious. The measures provided for by Art. 33 of the Law of 21 June 1898, on the rural Code, are applicable to all species of birds, in the case of fowl plague. The carcasses of birds in the area declared infected are removed by an officially authorized knacker, or buried in ground situated at least 100 metres from houses, wells, springs, streams and adequately fenced in to prevent access to animals. The carcasses must be covered with quicklime and a layer of earth at least one metre deep. It is prohibited to (a) deliver for consumption dead or slaughtered animals; (b) sell eggs for any other purpose than biscuit-making; (c) introduce within the area declared infected, eggs for hatching and birds of any species.

Decree No. 49-214 of 15 February 1949 (*J. O.*, No. 42, 17 February 1949, p. 1770) carries provisions

relative to the importation of meat and other products of animal origin. The products of animal origin indicated in a table annexed to the Decree, are only authorized for importation into France if accompanied by a certificate issued by the Veterinary Service of the State of origin, testifying that the merchandise is derived entirely from animals recognized as healthy and free from any disease at the time of slaughtering, that they contain no antiseptic substance and that they were prepared and dispatched under conditions complying with all requirements of food hygiene. All consignments not accompanied by a regularly drawn up health certificate, is returned. The products are also subjected to sanitary inspection.

A specimen of the certificate required from the country of origin is given as annex. The certificate should be drawn up in the language of the country of origin and translated into French on the back of the document. Among the products given in the annexed table, attention is called to the following: fresh or frozen beef, mutton, pork, horse, asinine and mule-flesh; edible offal; bacon; unrefined suet; salt, dried, smoked meat and pork; guts, animal bladders and stomachs; animal glands and organs, margarine, if it contains an animal fat, exception being made for fats obtained from marine animals; fresh sausages, large 'dry' sausages and similar products other than liver sausage; other meat preparations and preserves, canned, potted, in pies or other forms with or without the addition of vegetables or other vegetable products, etc.

Decree No. 49-433 of 23 March 1949 (*J. O.*, No. 75, 27 March 1949, p. 3223) establishes the terms and conditions relative to the attribution of the indemnities due to proprietors of animals slaughtered because affected by glanders. The indemnity is fixed at 75 per cent. of the value of the animal before contracting the disease, and cannot exceed a maximum of 80,000 francs per animal slaughtered by order of the mayor after glanders has been verified. This maximum, however, may attain 120,000 francs, if the slaughtered animal is a stallion recognized qualified for service under the conditions laid down by the regulations in force.

LUXEMBOURG

In order to prevent the invasion, development and spread of contagious livestock diseases, in particular, tularemia and fowl pest, considering the grave danger entailed through importing live game, an Order of 6 April 1949 (*M. L.*, No. 14, 12 April 1949, p. 231) prohibits provisionally the importation into and transit through the territory of the Grand Duchy of Luxembourg of live winged and ground game, of any origin. Exceptions may be made at the request of the importers and after

the chief veterinary inspector has reported on the matter.

Another Order of 6 April 1949 (*Ibid.*, p. 231) carries provisions relative to the pasturing of Luxembourg cattle in Belgian territory. At the time of transporting their stock to their pastures in Belgian territory, the stockowners should produce (a) the export licence delivered by the Government; (b) a certificate delivered by a Luxembourg veterinarian, testifying that the sanitary examination made in the past 24 hours did not reveal any symptom of contagious disease and that the locality of origin of the livestock is also exempt. All the animals should be vaccinated against foot-and-mouth disease before crossing the frontier; (c) the record-book in which the cattle to be pastured are registered. As soon as the stock arrive in Belgian territory, the animals are to be reported to the Belgian inspection veterinarian. On return to the Grand Duchy, the Luxembourg proprietor is required to produce, *inter alia*, a health certificate delivered by the official Belgian veterinarian, and his record-book.

(m) Sericulture.

ITALY

Ministerial Decree of 23 February 1949 (*G. U.*, No. 50, 2 March 1949, p. 563) specifies the types and qualities of silkworm eggs which can be put up for sale for the 1950 sericultural season. The National Bureau for the regulation of silkworm egg production and distribution will take the necessary steps for distribution as regards both quality and quantity, by indicating to the different silk producing establishments the quota of prescribed breeds and crossbreeds each is required to produce in relation to its total annual production.

IV. ECONOMIC AFFAIRS AND MARKETS

(a) European economic cooperation.

LUXEMBOURG

Law of 29 March 1949 (*M. L.*, No. 17, 25 April 1949, p. 353) approves the Final Act of the Second Session of the Committee for European Economic Cooperation, of the European Economic Cooperation Convention, the additional Protocol on legal competency, the privileges and immunities of the organization, as well as the additional Protocol of the financial management of the organization, signed in Paris, 16 April 1948.

PORTUGAL

An Act of the President of the Portuguese Republic, dated 15 November 1948 (*D. d. G.*, 1st Series, No. 82, 20 April 1949, p. 259) confirms and

ratifies the Convention of European Economic Cooperation, with additional Protocols I and II, signed in Paris on 16 April 1948. The instrument of ratification of the Convention, which had already been approved by Decree Law No. 37:508 of 15 September 1948, has been deposited in the Record Office of the Government of the French Republic on 4 April 1949.

SWITZERLAND

The Federal Order of 7 October 1948 (*R. L. F.*, No. 3, 20 January 1949, p. 25) approves the Convention of the European Economic Cooperation, signed in Paris on 16 April 1948, and authorizes the Federal Council to ratify it.

(b) Commercial treaties, economic agreements, tariff conventions, etc.

LUXEMBOURG

Law of 29 March 1949 (*M. L.*, No. 15, 19 April 1949, p. 246) approves the economic cooperation agreement between the Grand Duchy of Luxembourg and the United States of America, the appended explanatory notes signed in Luxembourg on 3 July 1948, and the exchange of letters the same day between the Governments of the Grand Duchy of Luxembourg and of the United States concerning the treatment of the most favoured nation.

SWITZERLAND

A tariff convention has been concluded between the Belgo-Luxembourg Economic Union and the Kingdom of the Netherlands on the one side, and Switzerland on the other (the text was published in *R. L. F.*, No. 16, 21 April 1949, p. 377). This agreement relative to the application of the respective customs tariffs was signed in Brussels on 12 February 1949, and the Governments signatories agreed to put it into application provisionally on 1 March 1949. By virtue of this convention, the natural or processed products of the customs territory of Switzerland and those of the Belgo-Luxembourg Economic Union and the Netherlands enumerated respectively in lists A and B, will benefit from reduced import duties. The list of Swiss natural or processed products includes hard or semi-hard cheeses, apples and pears, and that of the Belgo-Luxembourg Economic Union and the Netherlands, grapefruit, Witloof chicory, dried chicory roots, eggs, flower bulbs and tubers, living plants, in tubs or pots, with or without ball of earth, like *Kentia* palms, *Cocos* spp., *Areca*, *Chamaerops* palms, etc.

Federal Order of 10 February 1949 (*R. L. F.*, No. 13, 31 March 1949, p. 313) approves the commercial treaties, the agreement regarding the exchange

of goods and the settling of payments, as well as the agreement relative to the indemnification of Swiss interests in Yugoslavia affected by nationalization, expropriation and restriction measures, concluded on 27 September 1948 between the Swiss Confederation and the People's Federative Republic of Yugoslavia.

A Federal Order of 22 December 1948 (*R. L. F.*, No. 20, 12 May 1949, p. 429) approves the Treaty of friendship and settlement between Switzerland and India signed in New Delhi on 14 August 1948. This treaty became operative on 5 May 1949. The clauses of the Treaty assure the goods of both contracting parties being given the most favoured nation treatment. The negotiation of a more complete trade agreement, however, is envisaged in the near future.

(c) Foreign trade.

FRANCE

A Decree of 30 April 1949 (*J. O.*, No. 105, 2 and 3 May 1949, p. 4346) enforces application, beginning 17 March 1949 of the minimum customs duties on products exported from Chile to France and Overseas Territories.

ITALY

Ministerial Decree of 15 February 1949 (*G. U.*, No. 103, 5 May 1949, p. 1138) carries provisions relative to mutual transactions between Italy and Turkey. On endorsement of the Minister for Foreign Trade, exchange of goods can be effected with Turkey in the form of a reciprocity operation, notwithstanding the rules of Ministerial Decree of 10 November 1948.

Another Ministerial Decree of 28 February 1949 (*Ibid.*, p. 1138) contains the provisions regarding the mutual transactions effected between Italy and the French Franc Zone.

LUXEMBOURG

Order of 2 April 1949 (*M. L.*, No. 14, 12 April 1949, p. 227) restores the importation of certain products to the list of ordinary licences. As from 4 April 1949, the rule of declaration-licence is no longer applicable to a certain number of products including oranges, lemons, coffee, wines, spirituous liquors and spirits, tobacco.

PORTUGAL

Decree Law No. 37:280 of 15 January 1949 (*D. d. G.*, 1st Series, No. 10, 15 January 1949, p. 25) extends to 31 March 1949 the period of validity of Decree Law No. 31:856 of 16 January 1942, which authorizes the Minister of Finance, after consultation

with the Minister of Economy, to apply the minimum tariff to commodities for the provisioning of the country, when the duty at the said tariff has not already been fixed by virtue of international agreements.

Another Decree Law No. 37 : 281 of the same date (*Ibid.*, p. 26) maintains in force, until otherwise decided, the provisions of Decree Law No. 30 : 252, doubling the special duties included in the export tariff and fixing at 2.5 per cent. the tariff for *ad valorem* duties.

SWITZERLAND

Ordinance No. 54 of the Federal Department of Public Economy, dated 22 February 1949 (*R. L. F.*, No. 8, 24 February 1949, p. 157) suppresses certain import restrictions prescribed in Ordinance No. 6 of 26 April 1940, relative to import and export control. Beginning 1 March 1949, a special permit is no longer required for sunflower oil, denatured olive oil and olein, fluid fats and non-specified oils, animal oils of all kinds, solidified oils and fats for industrial uses, crude oils, etc.

Ordinance No. 55 of the Federal Department of Public Economy, dated 11 April 1949 (*R. L. F.*, No. 15, 14 April 1949, p. 375) substitutes Schedule II of Ordinance No. 52 of the same Department, dated 23 December 1948, relative to import and export control (suppression of export restrictions). By virtue of the new provisions, all merchandise on the export tariff list, as also the commodities indicated below, require a special permit for export to any country: cereals, maize, pulses husked, bruised, hulled or crushed, coarse ground wheat flour, semolina, flour, bread, biscuits, edible pastes, beans, cocoa-butter, cheeses, etc.

Order No. 60 of the Federal Council, dated 13 April 1949 (*R. L. F.*, No. 15, 14 April 1949, p. 373) bears restrictions on imports, taken by virtue of Federal Order of 14 October 1933 relative to measures of economic defence, in the terms given it on 22 June 1939, extended by Federal Order dated 16 June 1948. Cabbages, carrots, onions, tomatoes and other fresh vegetables, including artichokes, asparagus, gherkins, French beans and green peas, truffles can only be imported by special permission of the Import and Export Service of the Trade Division, Department of Public Economy. The Order establishes special import duties for these products. A special permit is also required for the importation of wine in casks, up to 13° alcohol inclusive, and 13.1° alcohol and over.

Further restrictions on imports are laid down in Order No. 61 of the Federal Council, dated 29 April 1949 (*R. L. F.*, No. 18, 29 April 1949, p. 405), which establishes that some commodities can only be imported through the intermediary of the Swiss

Cooperative Cereals and Feedingstuffs Society. In addition, the Department of Public Economy is authorized to restrict imports from certain countries and to fix the quotas for each of these countries. The commodities subjected to regulation are cereals and products serving for stockfeed.

(d) Concentrated feedingstuffs and potatoes.

SWITZERLAND

By ordinance of the Federal Department of Public Economy, dated 14 February 1949 (*R. L. F.*, No. 8, 24 February 1949, p. 156) the purchase of concentrates is subordinated to that of fodder potatoes. The Ordinance, which became operative on 1 April 1949, establishes that during the second quarter of 1949, the Swiss Cooperative Cereals and Feedingstuffs Society will only deliver wheat, rye, oats, maize and millet for fodder to importers, according to their quotas, if they acquire or undertake to acquire, for the same purpose, potatoes or products containing potatoes, in the proportion which will be fixed in agreement with the Trade Division and the Excise-office for spirituous liquors.

The regulations provided by the above Ordinance are also applied to barley intended for stockfeed, by virtue of another Ordinance of the same Department, dated 9 March 1949 (*R. L. F.*, No. 12, 24 March 1949, p. 308).

(e) Packing and conditioning of exported vegetables and fruits.

FRANCE

An Order of 28 February 1949 (*J. O.*, No. 62, 12 March 1949, p. 2554) bears general regulations covering the packing and conditioning of fruits and vegetables dispatched under the export mark or national grade mark.

Except in the case of luxury products (hothouse products, Montreuil peaches, Thomery peaches and nectarines and Chasselas de Thomery grapes), which may have special packs, fruits and vegetables dispatched with the export mark or the national grade mark will require to be packed and conditioned in conformity with the provisions of the Order. The packs must be new and conform with the standard sizes and composition fixed by the Order.

Another Order of 1 March 1949 (*Ibid.*, p. 2555) regulates the conditioning of fruits and vegetables intended for industry and exported under the export mark. The export mark can be affixed to fresh or frozen fruits and vegetables intended for industrial processing. To qualify for export, the packing of these products must conform to the conditions defined by this Order.

A third Order of 2 March 1949 (*Ibid.*, p. 2555) authorizes the setting up of Approval Commissions for fruits and vegetables exported with the export mark or the national grade mark. An Approval Commission will be set up at each export point authorized for the export of fruits and vegetables and in every production or dispatch centre where it is considered necessary. Each Commission will concern itself solely with judging the exactness of the findings of the officials for checking infractions of the provisions relative to the application of the export mark or the national grade mark, when an appeal against these findings is presented by the exporter or by his representative.

(f) National grade marks.

FRANCE

Order of 12 March 1949 (*J. O.*, No. 63, 13 March 1949, p. 2584) provides regulation of the national grade or quality mark. The object of this mark, established by Decree of 12 June 1946, is to assure French and foreign consumers 'that a French product, because of its excellent quality, can meet world competition'. The national mark is optional, and the manufacturers are at liberty to apply for it or not, being fully informed of the obligations entailed. The manufacturers are responsible for the products labelled with this mark and which they put up for sale.

Considered as 'French products' to which the quality mark may be allocated are soil products and material of metropolitan France and the four Overseas Departments, as well as the products manufactured or processed in metropolitan France or in the Overseas Departments.

(g) Price control and fixing :

(i) General provisions

FRANCE

By Decree No. 49-48 of 12 January 1949 (*J. O.*, No. 11, 13 January 1949, p. 578) the Ministers concerned and the Secretary of State for Economic Affairs are authorized to decide, for agricultural and fishery products at the different stages of commercialization, measures for harmonizing consumption prices with production prices. Infractions will be considered as illegal price practices, and when verified, proceeded against and repressed.

(ii) Stockfeeds

BELGIUM

A Ministerial Order of 3 January 1949 (*M. B.*, No. 7, 7 January 1949, p. 100) regulates the prices of oilcakes, schilfers, schroots and middlings for use as stockfeed. It is prohibited to offer for sale,

to sell or purchase these products intended for stockfeed at prices higher than those prescribed by the Order.

The preceding dispositions were repealed by Ministerial Order of 4 February 1949 (*M. B.*, No. 37, 6 February 1949, p. 838) which establishes two categories of prices as follows: A. Price to be paid by makers of stockfeeds, separately for imported products and for national products; B. Price to be paid by the consumer or the breeder-consumer.

A third Order of 25 March 1949 (*M. B.*, No. 91, 1 April 1949, p. 2537) abrogates the preceding Order and subjects to the normal price regulation, the price of oilcakes, 'schilfers', 'schroots' and middlings, as well as the price of fish meal and tankage for stockfeeding.

FRANCE

By Order of 2 February 1949 (*J. O.*, No. 33, 7 and 8 February 1949, p. 1378) only groundnut and linseed oilcake are still subject to control quota. Other oilcakes may be purchased freely at the authorized price. The Order of 11 April 1946 relative to the allocation of feedingstuffs is repealed.

(iii) Slaughter animals and meat

FRANCE

Three Orders of 25 January 1949 (*J. O.*, No. 22, 26 January 1949, pp. 452-453) lay down the fixed maximum selling prices for sheep and goats, calves and cattle on the hoof and for butcher's meat. The fixed maximum selling price per kg. of mutton, goat-flesh, veal and beef on the hoof are fixed for the markets of Paris, Marseille, Metz, Nancy, for the wholesale cattle markets at the large consumption centres, and for other wholesale markets.

(iv) Wheat and flour, bran and middlings

BELGIUM

Ministerial Order of 31 December 1948 (*M. B.*, No. 6, 6 January 1949, p. 86) regulates the price of wheat flour not intended for bread-making. Prices for bulk quantities are fixed as follows: goods delivered at the mill, tax not included, 670 francs per quintal; goods delivered at wholesaler, tax not included, 692.60 fr. per ql.; goods sold free processing, excluding tax, 692.50 fr. per ql., and price to be paid by consumer, 7.80 fr. per kg. The price of wheat flour not intended for bread-making, prepared or otherwise and presented in its original packing in quantities of 5 kg. or less, is subject to the normal price ruling. The Ministerial Order of 5 November 1948, which regulates this question, is repealed.

FRANCE

Decree No. 49-38 of 11 January 1949 (*J. O.*, No. 10, 12 January 1949, p. 535) modifies the selling price of bran and middlings fixed by Decrees Nos. 48-1256 of 9 August 1948 and 48-1702 of 2 November 1948. The new selling price for bran and middlings per gross quintal considered as net, placed in the buyer's sacks, at mill, the transaction tax and production tax being calculated extra, is fixed at 1,150 francs, as from 16 January 1949.

A Decree of 29 April 1949 (*J. O.*, No. 103, 30 April 1949, p. 4300) modifies the second paragraph of Article 2 of the Decree dated 22 March 1947, relative to the fixing of wheat prices, by establishing that the relative importance of the different factors in calculating the production costs for a hectare of wheat, may be revised, for the 1948-49 season, before 15 May 1949.

(v) *Edible oils*

BELGIUM

Ministerial Order of 24 March 1949 (*M. B.*, No. 85, 26 March 1949, p. 2301) regulates the prices of table oil.

The maximum prices are fixed as follows: (a) Price to be paid by the wholesaler: groundnut oil, 25.85 fr. per litre; maize oil, 21.50 fr. per litre; other oils, except olive oil, 20.60 fr. per litre; (b) price to be paid by the retailer: groundnut oil, 29.20 fr. per litre; other oils, except olive oil, 24.30 fr. per litre; (c) price to be paid by the consumer: groundnut oil, 33 fr. per l; other oils, save olive oil, 27.50 fr. The price of olive oil is governed by the normal price ruling.

FRANCE

Order of 25 March 1949 (*J. O.*, No. 75, 27 March 1949, p. 3209) establishes the price of olive oil imported from Spain. The fixed maximum selling prices for imported olive oil are established as follows: (1) Price charged by the National Association for the purchase of oleaginous products to its members: 30,750 francs per quintal; (2) selling price of members of the aforesaid association to wholesalers: 39,577 fr. per ql.; (3) selling price charged by wholesalers to retailers: 42,482 fr. per ql.; (4) selling price of retailer to consumer: 470 fr. per kg.

(vi) *Milk and dairy products*

FRANCE

Order of 5 January 1949 (*J. O.*, No. 12, 14 January 1949 p. 633) fixes the rate of the interprofessional quota on milk and dairy products collected in metropolitan territory at 2 per 1000 of the purchase prices at production as specified by the assessment texts.

During the 1948-49 winter, the quota for milk collected is calculated by contract and fixed at a uniform rate for the entire metropolitan territory at 44/1000 per litre.

(vii) *Roasted barley, maize, fecula, etc.*

BELGIUM

Ministerial Order of 31 December 1948 (*M. B.*, No. 8, 8 January 1949, p. 131) abrogates certain provisions regulating the prices of the following products: roasted barley; maize derivatives and potato fecula; by-products of oats; cornflour; glucose; rye flour; forage grains, etc. These products are governed by the normal price ruling.

(viii) *Potatoes and seed-rice*

PORTUGAL

Order No. 12: 705 of 4 January 1949 (*D. d. G.*, 1st Series, No. 2, 4 January 1949, p. 8) establishes the selling prices, per kg., of approved varieties of seed-rice, at the rate of \$ 3.75 for Chinese variety, and \$ 4.10 for Allorio, Ponta Rubra and Precoco varieties.

A Decision of the Ministry of Economy, dated 5 April 1949 (*D. d. G.*, 1st Series, No. 90, 29 April 1949, p. 300) lays down that, up to 20 May 1949, the dispositions of Order No. 12: 628, dated 11 November 1948, relative to the selling price to the public of this season's domestic potatoes, are not applicable to the said product.

(ix) *Lard*

BELGIUM

Ministerial Order of 25 April 1949 (*M. B.*, No. 119, 29 April 1949, p. 3513) regulates the prices of lard.

The maximum selling price to the consumer of imported lard has been fixed at 25 francs per kg., while the price of the national product is regulated according to the normal price ruling.

V. STATISTICS

BELGIUM

Ministerial Order of 1 March 1949 (*M. B.*, No. 70, 11 March 1949, p. 1719) prescribes the census of cultivated land by 15 March 1949, preparatory to the agricultural and horticultural census of 15 May 1949.

The communal administrations are required to bring up to date, up to 15 March 1949, the cultivators' forms drawn up in conformity with the Ministerial Order of 1 March 1948 relative to the census of cultivated land. This work is to be carried out under the direct supervision and responsibility of the burgomaster. Officials of the National Statistics

Institute, who will be in charge of the census operations, may be delegated locally to inspect operations and, if necessary, supplement the instructions sent to the burgomasters by oral explanations.

The proprietors, chief lessors or bailiffs, on 15 March 1949, of not less than 100 sq. metres of cultivable land, are required to supply the communal administrations with complete information regarding the surname, Christian names and address of the lessee or lessees of each parcel of land, and to declare the location and cadastral area given in lease to each. On the other hand, the persons who operate or cause to be operated on their behalf, not less than 100 sq. metres of land on 15 March 1949, are required to furnish complete information regarding the name and address of the proprietor, the area, as well as the location of each cadastral parcel of which they have the use. In general, everyone to whom the census refers is required to supply voluntarily all useful information concerning changes or modifications which have taken place in the situation of the cultivated lands.

Another Ministerial Order, dated 16 April 1949 (*M. B.*, No. 120, 30 April 1949, p. 3563) prescribes the agricultural and horticultural census for 15 May 1949. The burgomasters are commissioned with the execution of the census. Operations begin on 16 May 1949 and end on 4 June 1949; they indicate the situation as existing on 15 May, midnight.

Subject to the agricultural and horticultural census are all persons who, on 15 May 1949: (1) operate or occupy, in any capacity whatsoever, in Belgium or abroad, in a bordering country and in the frontier zone, one or several parcels of cultivated land, indicated in Schedule I of the Order, totalling an area of not less than one are, or (2) keep one or several animals as indicated in Schedule II of the Order, or (3) are possessors of agricultural tractors, power-driven cultivators or jeeps for farm use.

In addition, all persons who are engaged in market-gardening, fruit or flower-growing for commercial purposes, must furnish information regarding the products mentioned in Schedule III of the Order.

The Order bears special provisions concerning the appointment of census-takers, the execution and supervision of the census, official execution, and mode of covering cost, secrecy of returns, expert supervision entrusted to the National Statistics Institute, and penalties.

FRANCE

Order of 14 April 1949 (*J. O.*, No. 96, 22 April, p. 4025) carries dispositions relative to the agricultural survey for 1949. The object of this survey is to collect from farmers and communal commissions for agricultural statistics the data required for the elaboration of government measures and for the working of the administrative services.

Every cereal grower is required to make a statement, between 1 and 10 May 1949, at the municipality of the commune in which his holding is located. The statements are registered by the Secretary of the communal agricultural statistics commission in the land register 'area under cereals', and countersigned by the informant. The communal agricultural statistics commission is required to draw up the communal agricultural statistics return on (1) the repartition of the territory of the commune; (2) the repartition of the arable land of the commune; (3) the livestock of the commune.

LUXEMBOURG

In order to adapt to the present market situation for domestic cereals the extraction and mixture rates and to guarantee the full utilization of the bread wheats of the 1948 season before the getting in of the present year's crop, an Order of 12 February 1949 (*M. L.*, No. 7, 19 February 1949, p. 127) lays down that grain-growers who, on 1 March 1949, still hold stocks of bread grains (wheat, maslin, rye) from the 1948 season, are required to declare same within 5 days after 1 March 1949. These returns are to be registered in a statement prepared by the communal secretariat, in alphabetical order, noting the surname, Christian names and address of the informant, the quantities of cereals, separately for wheat, maslin and rye. Grain stocks not declared will not be recognized as domestic grains for use in compulsory milling.

Ministerial Order of 31 March 1949 (*M. L.*, No. 15, 19 April 1949, p. 257) establishes that on 15 May 1949 a land census will be taken and at the same time a census of fruit trees and livestock in all communes of the country. The persons required to make a return are all those who operate or occupy in the Grand Duchy or abroad a total area of 5000 sq. metres or over, utilized all or in part for crop fields, garden, orchard, meadow, grazing, vineyard or forest. A statement has also to be made by all persons who, operating a total area of less than 50 ares, grow horticultural products, truck or fruit crops for sale, who are engaged in wheat cultivation or vine-growing or who are possessors of horses, mules, pigs, sheep, cattle and goats, and also poultry. The areas located abroad are disregarded only when the crop is not brought into the Grand Duchy.

The cultivators who are required to make a statement in conformity with the provisions of the Order, are also required to declare the fruit trees planted on the land they operate. The livestock census will state the number of animals belonging to each proprietor without specifying whether the stock is at the farm or at outlying holdings, at the slaughterhouse or elsewhere.

The informants will use the questionnaires supplied to them by the census-takers.

VI. FORESTRY

BELGIUM

In order to prevent the introduction and spread in the country of insect or cryptogamic pests of conifers, a Decree of the Regent, dated 19 February 1949 (*M. B.*, No. 63, 4 March 1949, p. 491) prohibits the entry into Belgium, even in transit, of conifers, not completely barked, with circumference greater than 30 cm. The Minister of Agriculture may, within six months of the Order becoming operative, authorize, by special derogations, importation of the said timber from a country not bordering Belgium. In this case, the importers are required to remove, within twenty days after entry, the bark from timber introduced into the country by special derogation and to destroy the bark by fire. The same requirements apply to timber already introduced into the country, and must be carried out within twenty days at the most after date of publication of the Order.

FRANCE

Law No. 49-601 of 27 April 1949 (*J. O.*, No. 101, 28 April 1949, p. 4226) modifies the provisions in force relative to involuntary forest fire. Thus the fifth paragraph of Article 148 of the Forest Code is modified to increase the fine applicable to whosoever contravenes the rule against carrying fire from 6000 to 12,000 francs. In addition, between Art. 148 and Art. 149, another article 148 bis is inserted, by virtue of which will be punished by a fine of 12,000 to 200,000 fr. and will also be liable to imprisonment for a period from eleven days to six months, those persons who will have set fire to forests, heathland, woods, groves and retimbered land of third parties, by fires lighted less than 100 metres away, or by fires or lights carried or left without adequate precautions, or by fireworks lit or set off by carelessness.

VII. GAME

FRANCE

By virtue of Art. 7 of the Law of 28 June 1941 relative to game organization, an Order dated 19 February 1949 (*J. O.*, No. 49, 25 February 1949, p. 2056) prohibits the straying of dogs in cultivated or other fields, in meadows, vineyards, along the banks of streams, marshes, pools and lakes, and in woods, in order to prevent the destruction of birds and to foster their restocking.

VIII. FISHERY

(a) International conventions.

FRANCE

Decree No. 48-2044 of 31 December 1948 (*J. O.*, No. 6, 7 January 1949, p. 312) publishes the International Convention for the regulation of whaling, the Final Act and Protocol for the regulation of whaling, signed in Washington on 2 December 1946.

ITALY

Presidential Decree No. 1618 of 7 December 1948 (*G. U.*, No. 45, 24 February 1949, p. 502) gives full and complete execution to the exchange of notes between Italy and Switzerland relative to certain modifications in the Italian-Swiss Fishery Convention of 13 June 1906, and relative regulation. Notes exchanged in Rome, 13 October, 19 and 30 December 1947.

SWITZERLAND

Order of the Federal Council, dated 18 March 1949 (*R. L. F.*, No. 12, 24 March 1949, p. 293) suppresses the list of nets and other fishing tackle authorized in adjacent waters, appended to regulation of 2 May 1913 for the execution of the Italian-Swiss Convention of 13 June 1906, as well as the subsequent provisions amending the list. In substitution of this list a new one has been drafted following the notes exchanged on 1 and 16 March 1948 between the Federal Council and the Italian Government. The nets and fishing tackle now adopted which do not comply with the new provisions may continue to be used up to the end of 1952, although during this transition period new tackle which does not conform to the requirements prescribed in the list cannot be procured.

(b) General regulations.

BELGIUM

A Decree of the Regent dated 12 March 1949 (*M. B.*, No. 97, 7 April 1949, p. 2744) regulates the fishing of shotten herring. Notwithstanding the legislation in force, it is permitted, during the shotten herring season and up to 1 March each year at the latest, to employ in territorial waters sprat nets and drag-nets, provided that the latter is fitted with a third trawl or floats on the back cord of the net and that the rim is not weighted. During the same period, all fishing in territorial waters, with vessels over 200 h.p. is prohibited.

Ministerial Order of 15 March 1949 (*M. B.*, Nos. 87-88, 28 and 29 March 1949, p. 2395) establishes the maximum retail prices for the sale of fresh fish. It is prohibited to offer for retail sale or to sell retail fresh fish at prices higher than those devolving from the application of the provisions of the Order.

For all fish sold cleaned and weighed before cleaning, the selling price of the retailer to the consumer cannot be higher than the purchase price of the retailer, tax included, multiplied by the coefficient 1.3. Special coefficients are established for certain species of fish, such as codfish, haddock, skate and turbot, which are weighed after cleaning.

FRANCE

An Order of 16 March 1949 (*J. O.*, No. 73, 25 March 1949, p. 3140) homologates, on the date 28 February 1949, the following French standard: NF V 21-001. Fishery.

An Order of the Merchant Marine Ministry, dated 31 March 1949 (*J. O.*, No. 99, 25 and 26 April 1949, p. 4168) notifies increase in the price of the control certificate for preserved preparations of fish, shell-fish and other marine animals, instituted by Decree of 15 May 1940, providing for the supervision of the manufacture of the said preserved products. Beginning 1 April 1949, the price of the certificate is raised to 6 francs.

Another Order of the same Ministry, dated 20 April 1949 (*Ibid.*, p. 4168) requires fishmongers and shippers to indicate the number of their trade licence on the trade labels affixed to consignments of fish over 10 kg. in weight. Disregard of this rule, or any fraud consisting in splitting up the consignments in order to escape this rule, will entail penalties as foreseen by law.

PORTUGAL

By Decree Law No. 37 : 295 of 5 February 1949 (*D. d. G.*, 1st Series, No. 23, 5 February 1949, p. 69) the Whalers' Gremio is authorized to contract, with the consent of the Minister for the Mercantile Marine, with the general deposit, credit and insurance Bank, loans for the financing of its activity. The loans are redeemable in a maximum period of ten years.

RUMANIA

Decision No. 62 of the Ministry of Agriculture, dated 9 February 1949 (*M. O.*, No. 36, 12 February 1949, p. 1224) fixes the tariff for fishing licence at 100 lei for fishers who are members of the State 'Compescaria' Association, and at 200 lei for professional and amateur fishermen.

(c) River fishery.

FRANCE

Decree No. 49-29 of 4 January 1949 (*J. O.*, No. 8, 9 January 1949, p. 435) modifies Article 6 of the Decree of 12 July 1941 bearing public administration regulation for the application of Art. 5 of the Law of 15 April 1829 relative to river fishery. This amendment increases the rate of the tax paid by members of fishery and pisciculture associations, and by fishery contractors and licence-holders for net fishing on public property, for the supervision and development of national piscicultural resources.

Law No. 49-180 dated 9 February 1949 (*J. O.*, No. 35, 10 February 1949, p. 1499) bears modifications to Articles 25 and 62 of the Law dated 15 April 1829 relative to river fishery. By virtue of these modifications whosoever throws into fishing waters drugs or bait of a nature such as to intoxicate or destroy the fish, shall be liable to a fine of 5,000 to 200,000 francs and to a term of imprisonment of one to five years. Anyone using dynamite or similar material shall be liable to the same penalties. The courts may prohibit old offenders from entering certain areas.

LUXEMBOURG

An Order of 25 February 1949 (*M. L.*, No. 9, 9 March 1949, p. 167) authorizes extension of the Order of 1 March 1937 regulating fishing in frontier waters, until further notice.

IX. RURAL WELFARE

(a) Social security.

FRANCE

By Decree No. 49-70 of 14 January 1949 (*J. O.*, No. 16, 19 January 1949, p. 756), the premium supplement which may be demanded, as from 1 January 1948, by enterprises which insure against injuries to workers in agricultural or forestry occupations to cover the increased charges levied by Law of 7 September 1948, cannot exceed, for each full year, 10 per cent. of the annual premium of the policy.

An Order of 31 January 1949 (*J. O.*, No. 27, 31 January 1949 and 1 February 1949, p. 1103) establishes the maximum administrative expenditure of agricultural insurance companies.

(b) Cooperation.

BELGIUM

Decree of the Regent of 19 January 1949 (*M. B.*, No. 42, 11 February 1949, p. 945) contains measures aiming at fostering agricultural cooperation, taking into account that the economic structure of Belgian agriculture requires the development of cooperation between the farmers; that the existence of the small and medium-sized farms depends to a large extent on cooperation, and that under these circumstances the general interest of the country demands that the public authorities support and promote agricultural cooperation by every possible means.

To this end, the Economic Division of the Ministry of Agriculture is instructed to: (1) study all problems concerning agricultural cooperation in Belgium; (2) organize, for the benefit of existing or future cooperative societies, a documentation and information service; (3) popularize the cooperative idea in farming circles, by calling upon, to the fullest possible extent, the collaboration of field service officials; (4) promote the establishment of new agricultural cooperatives in the sectors and districts where their utility is evident; (5) propose to the competent authorities and in the general interest all adequate measures likely to support and develop agricultural cooperation; (6) foster agreement and collaboration between agricultural cooperatives.

(c) Rural electrification.

FRANCE

Order of 15 February 1949 (*J. O.*, No. 44, 19 February 1949, p. 1870) fixes, for 1949, the maximum subsidizable expenditure for rural electrification operations. This maximum, per inhabitant supplied, is fixed at 60,000 francs.

BIBLIOGRAPHY

LIBRARY OF THE EUROPEAN REGIONAL OFFICE OF THE FAO

ARTICLES ON FAO

- 192 Aspectos de la situación lechera mundial. In: *Esnea* (Buenos Aires) 35, 1522, p. 2 (Abril 10, 1949).
- 193 L'Europe et son approvisionnement en pain. In: *Le Sillon romand* (Lausanne) 52, 2, p. 1-2 (6 V 1949).
- 194 FAO World tour. In: *Farmer and Stock-breeder* (London) 63, 3093, p. 144 (Jan. 18 1949).
- 195 Soil Specialists meet in Italy. In: *Farmer and Stock-breeder* (London) 62, 3076, p. 2183 (Sept. 21, 1948).
- 196 Ward, E. E. The outlook for ECAFE. In: *Far Eastern survey* (New York) 18, 7, p. 73-77 (April 6, 1949).

NEW BOOKS

ECONOMICS

- 757 *Annuario della congiuntura economica italiana 1938-1947*. Firenze, Vallecchi, 1949. 530 p. L. 2000.
- 758 Boodish, H. M. *Our industrial age*. New York, MacGraw-Hill, 1949.
- 759 Davin, L. *Les finances de 1939 à 1945*. Paris, Librairie de Médicis, 1949. 2 v., Frs. 750.
- 760 Fanfani, A. *Economia*. Brescia, Morcelliana, 1948. 168 p. L. 400.
- 761 Fraser, L. M. *Pensiero e linguaggio nella scienza economica*. Torino, UTET, 1949. 440 p. L. 400.
- 762 Marris, A. D. *Prospects for closer European economic integration: some aspects of the problem*. London, Chatham House, 1948. 19 p. 1s.
- 763 Oules, Firmin. *L'économie harmonisée*. Paris, Librairie générale de droit, 1949. 55 p. Frs. 200.
- 764 Peyret, Henry. *Le Plan Marshall peut-il sauver l'Europe? Paris, Société d'éditions françaises et internationales, 1948. 239 p. Frs. 220.*
- 765 Pigou, A. C. *Employment and equilibrium*. London, Macmillan, 1949, 304 p. 21s.
- 766 Saraceno, Pasquale. *Prospettive della ricostruzione economica europea*. Roma, Istituto poligrafico dello Stato, 1949. 103 p. L. 500.
- 767 Somers, H. M. *Public finance and national income*. Philadelphia, The Blakiston Co., 1949. \$ 4.50.

FOOD

- 768 Perona, A. *Tecnica e pratica della panificazione moderna*. Torino, Lavagnolo, 1948. 160 p. L. 400.
- 769 Tinkler, C. Kenneth and Helen Masters. *Foods*. Kingston Hill (Surrey), Technical Press, 1949. 293 p. 16s.

STATISTICS

- 770 Ferber, R. *Statistical techniques in market research*. New York, McGraw-Hill, 1949.
- 771 Teissier, Maurice. *Statistique mondiale 1938-1948*. Paris, F. Lanore, 1949. 64 p. Frs 120.

AGRICULTURE

- 772 *Annuaire de la Confédération générale de l'agriculture* 1948. Paris, 1949. 400 p. Frs. 300.
- 773 *Aziende agrarie di Trento. Almanacco agrario* 1949. Trento, Arti grafiche Saturnia, 1949. 300 p.
- 774 Bellincioni, G. Il progetto e la costruzione dei laghetti agricoli e per la provvista di acqua potabile. Torino, Lavagnolo, 1948. 248 p. L. 600.
- 775 Bellincioni, G. La tecnica dell'irrigazione. Torino, Lavagnolo, 1948, 224 p. L. 550.
- 776 Bonnier, Gaston et Georges Layens. Cours complet d'apiculture ed conduite d'un rucher isolé. Paris, Librairie générale de l'Enseignement, 1949. 458 p.
- 777 Brasse-Brossard, Lucien. Le destin de l'agriculture française. Paris, Presses universitaires de France, 1949. 128 p. Frs. 90.
- 778 British Agricultural Mission to South America. London, H. M. Stationery office, 1949. 51 p. 1s.
- 779 Bush, Raymond. Soft fruit growing. London, Penguin books, 1949. 2 vols. 3s.
- 780 Chang, P. K. Agriculture and industrialization. Cambridge, Harvard university press, 1949. 320 p. \$ 5.
- 781 Clayton, E. E. S. Soil erosion and its control. Sydney, Rural Bank of New South Wales, 1949. 96 p.
- 782 Congresso agrario commemorativo di quello tenuto in Casale Monferrato nel 1847: 30-31 agosto-1 settembre 1947. Casale Monferrato, La Grafica casalese, 1948. 191 p.
- 783 Congresso apistico nazionale (1°): Ancona, 25-27 ottobre 1947. Torino, Impronta, 1948. 274 p. L. 1000.
- 784 Dakers, J. S. Modern gardening. London, Cassell, 1949. 496 p. 21s.
- 785 Delobel, R., R. Marie Cardine et B. Fortin. Le nouveau régime des baux ruraux et des aliénations de biens ruraux. Paris, Delobel, 1949. 440 p. Frs. 475.
- 786 Demolon, Albert. La génétique des sols. Paris, Presses universitaires de France, 1949, 136 p. Frs. 90.
- 787 Denison, Merrill. Harvest triumphant: the story of Massey-Harris. Toronto, McClellan & Stewart, 1949. 351 p. \$ 8.
- 788 Dorey, O. G. The fruit farm: its establishment and costs. London, Faber & Faber, 1949. 12s. 6d.
- 789 Farmer and Stockbreeder year-book 1949. London, Farmer and Stockbreeder, 1949. 340 p. 7s. 6d.
- 790 Great Britain. Colonial Office. Report of the Commission of enquiry into the swollen shoot disease of cacao in the Gold Coast. London, H. M. Stationery office, 1949. 10 p. 3d.
- 791 Great Britain. Ministry of Agriculture and Fisheries. The co-operative marketing of horticultural produce in England and Wales. London, H. M. Stationery office, 1949. 72 p. 1s. 3d.
- 792 Great Britain. Ministry of Agriculture and Fisheries. Crop production in frames and cloches. London, H. M. Stationery office, 1949. 55 p. 2s. 6d.
- 793 Grigson, Geoffrey. An English farmhouse. London, Marx Parrish, 1949. 128 p. 21s.
- 794 Knott, J. E. Vegetable growing. London, Henry Kimpton, 1949. 314 p. 20s.
- 795 Lawrence, W. J. Science and the glasshouse. London, Oliver & Boyd, 1949. 184 p. 15s.
- 796 Lefebvre, A. Formules de fumures. Paris, Flammarion, 1949. 296 p. Frs. 175.
- 797 Licciardelli, G. Come produrre carne rapidamente ed in abbondanza con l'allevamento casalingo di conigli e colombi. Roma, Urbinati, 1948. 48 p. L. 100.
- 798 Long, W. H. and G. M. Davies. Farm life in a Yorkshire dale. Clapham, Dalesman publishing Co., 1949. 111 p. 5s.
- 799 Longo, A. Viticoltura. Roma, Ramo editoriale degli agricoltori. 1948. 616 p. L. 2800.
- 800 Lugeon, André. La culture des légumes. Lausanne, Payot, 1949. 283 p. Frs. 8.80.
- 801 Manley, R. O. B. Bee-keeping in Britain. London, Faber & Faber, 1949. 439 p. 21s.
- 802 Maurea, P. Il latifondo. 2 vols. Lanciano, Carabba, 1949. L. 2.270.
- 803 Mercer, S. P. Farm and garden seeds. London, Crosby Lockwood, 1949. 156 p. 12 s. 6d.
- 804 Nash, T. A. M. The Anchau rural development and settlement scheme. London, H. M. Stationery scheme. 1949. 22 p. 3s. 6d.
- 805 Oliva, Alberto. Trattato di agricoltura generale. Milano, Aetas, 1948. 569 p.

FORESTRY

- 806 Sheat, Wilfrid G. Propagation of trees, shrubs and conifers. London, Macmillan, 1949. 479 p. 25s.

LAW

- 807 Progetto di legge contenente disposizioni sui contratti agrari di mezzadria, colonia parziaria e compartecipazione. Roma, Ramo editoriale degli agricoltori, 1949. 21 p.

F A O

NATIONAL COMMITTEES IN EUROPE

AUSTRIA

Chairman : Dr R. PHILIPP,
Secretary : Mr W. O. MOEBIUS
Am Hof, 4 - VIENNA

BELGIUM

Chairman :
Secretary : Mr G. WATSON,
10, rue du Méridien - BRUSSELS
Cable Address : FAOCOM - BRUSSELS

CZECHOSLOVAKIA

Chairman : Mr J. PROKS,
Secretary-General : Dr JAN TAUBER,
Kostelní ulice 44, Ministerstvo zemědělství -
PRAGUE VII - Letná
Cable Address : FAOCOM - PRAGUE

DENMARK

Chairman : Mr A. P. JACOBSEN,
Secretary : Mr H. P. TOFT-MIKKELSEN
Rigsdagen, Christiansborg, - COPENHAGEN K.
Cable Address : DANFAO - COPENHAGEN

FINLAND

Chairman : Dr E. SAARI
Secretary-General : Miss ELISABETH BEURAIN
Unioninkatu 40 B - HELSINKI
Cable Address : FAOCOM HELSINKI

FRANCE

Chairman : Prof. A. MAYER
Technical Secretary : Mr M. CÉPÈDE,
c/o Ministère de l'Agriculture,
78, rue de Varennes - PARIS (VII^{ème})
Cable Address : AGRITUDE - PARIS

GREECE

Chairman : Mr LAMBRAS EUTAXIAS,
Vice-Chairman : Mr N. CHRISTODOULU
Secretary : Mr B. MOUSSOURES
Ministry of Agriculture - ATHENS
Cable Address : FAOCOM - ATHENS

HUNGARY

Chairman : Minister of Agriculture.
Secretary-General : Dr ALAJOS BALLA,
v. Kossuth Lajos-tér, 11 - BUDAPEST, V.
Cable Address : HUNGFAO - BUDAPEST

ICELAND

Chairman : Mr A. J. EYLANDS,
Secretary : Mr T. ASGEIRSSON,
c/o Ministry for Foreign Affairs - REYKJAVIK
Cable Address : EXTERNAL - REYKJAVIK

IRELAND

Chairman : Mr J. C. NAGLE
Alternate Chairman : Mr M. J. BARRY,
Secretary : Mr D. J. BUCKLEY,
Department of Agriculture,
Government Buildings - DUBLIN
Cable Address : RESOURCES - DUBLIN

ITALY

Chairman : Mr A. SEGNI, Minister of Agriculture
Secretary-General : Prof. G. UGO PAPI,
Ministry of Agriculture, Via XX Settembre
- ROME
Cable Address : FAOCOM - ROME

LUXEMBOURG

Chairman :
Secretary : Mr J. P. BUEHLER,
Ministère de l'Agriculture,
3, rue de la Congrégation - LUXEMBOURG
Cable Address : FAOCOM - LUXEMBOURG

NETHERLANDS

Chairman : Mr S. L. MANSHOLT, Minister of
Agriculture, Fisheries and Food,
Secretary : Mr J. J. VAN DER LEE
Ministry of Agriculture
Boorlaan 2 - THE HAGUE
Cable Address : FAOCOM - THE HAGUE

NORWAY

Chairman : Dr KARL EVANG,
Secretary : Mr OLE MJELDE,
Statens Ernaeringsraad,
Kronprinsensgt, 10 - OSLO
Cable Address : FOODAGRI - OSLO

POLAND

Chairman : Mr KAZIMIERZ SOKOŁOWSKI
Secretary-General : Mr STEPHEN KROLIKOWSKI,
Polish National Advisory FAO Committee,
Central Planning Board,
3 Senacka Street - WARSAW
Cable Address : FAOCOM - WARSAW

PORTUGAL

Chairman : Prof. ANTONIO DE SOUSA DA CAMARA,
Secretary : Dr HENRIQUE MIRANDA MARTINS DE
CARVALHO,
c/o Ministério dos Estrangeiros Necessidades,
LISBON
Cable Address : FAOCOM KOSBOA - LISBON

SWITZERLAND

Chairman : Senator F. T. WAHLEN
Secretary : Mr H. KELLER,
c/o Division de l'Agriculture du Département
d'Economie Publique,
25, Laupenstrasse - BERNE
Cable Address : FAOCOM - BERNE

TURKEY

The Minister of Foreign Affairs - ANKARA

UNITED KINGDOM

Chairman : Ministry of Food.
Secretary : Mr B. I. FELTON,
Ministry of Food,
Montagu House,
Whitehall - LONDON, S. W. 1
Cable Address : FAOCOM - LONDON

YUGOSLAVIA

The Minister for Foreign Affairs of the Fed-
eral People's Republic of Yugoslavia - BEL-
GRADE

LIST OF THE EUROPEAN SALES AGENTS FOR **FAO** PUBLICATIONS

BELGIUM: Agence et Messageries de la Presse
14/22, rue du Persil

BRUSSELS

CZECHOSLOVAKIA: Orbis
Stalinova 46

PRAGUE

DENMARK: Librairie internationale
Ejnar Munksgaard
Nørregade, 6

COPENHAGEN

FINLAND: Akateeminen Kirjakauppa
2 Keskaskatu

HELSINKI

FRANCE: Editions A. Pedone
13, rue Soufflot

PARIS Vème

GREECE: Eleftheroudakis, Librairie internationale
ATHENS

HUNGARY: Grill's Bookshop
R. Gergely Ltd.
Dorotty Utca, 2

BUDAPEST V

IRELAND: the Government's Stationery office
DUBLIN

ITALY: The European Regional Office of FAO
Villa Borghese

ROME

NETHERLANDS: N. V. Martinus Nijhoff
Lange Voorhout, 9

THE HAGUE

NORWAY: Johann Grundt Tanum Forlag
Kr. Augustg. 7 A

OSLO

PORTUGAL: Livraria Bertrand S. A. R. L.
73-75, Rua Garrett

LISBON

SWEDEN: Aktiebolaget C. E. Fritzes
Kungl. Hovbokhandel.
Fredsgatan, 2

STOCKHOLM

SWITZERLAND (French speaking):
Librairie Payot

LAUSANNE

(Branch Offices: Geneva,
Neuchâtel, Vevey, Montreux, Bâle,
Zurich)

SWITZERLAND (German speaking):
Hans Raunhardt

Kirchgasse, 17

ZURICH

UNITED KINGDOM: H. M. Stationery Office
P. O. Box 569

LONDON S. E. 1.

TURKEY: Librairie Hachette
469, Istiklâl Caddesi, Peyoglu

ISTAMBOUL

YUGOSLAVIA: Drzavno Preduzece,
Jugoslovenska Knjiga
Moskovska Ul. 36,

BELGRADE

*This publication is sold direct by the Rome Bureau of FAO or by our sales-agents.
Payment may be made to the American Express Co., in those countries where there is a
branch office, on behalf of FAO in Rome.*

Annual subscription (4 numbers),
in U. S. dollars: **2.60**

(Plus 10 % for postage and packing)

Price of each number,
in U. S. dollars: **0.75**